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# EXEMPTION OR DEFERRED CLASSIFICATION OF CERTAIN EMPLOYEES OF THE DEPART-MENT OF AGRICULTURE

## **LETTER**

FROM THE

### SECRETARY OF AGRICULTURE

TRANSMITTING

A STATEMENT SHOWING THE NAMES OF EMPLOYEES OF THE DEPARTMENT OF AGRICULTURE FOR WHOM REQUESTS FOR EXEMPTION OR DEFERRED CLASSIFICATION HAVE BEEN ASKED AND ALLOWED



JANUARY 8, 1919.—Referred to the Committee on Military Affairs and ordered to be printed

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919



# EXEMPTION OR DEFERRED CLASSIFICATION OF CERTAIN EMPLOYEES OF THE DEPART-MENT OF AGRICULTURE

## LETTER

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### SECRETARY OF AGRICULTURE

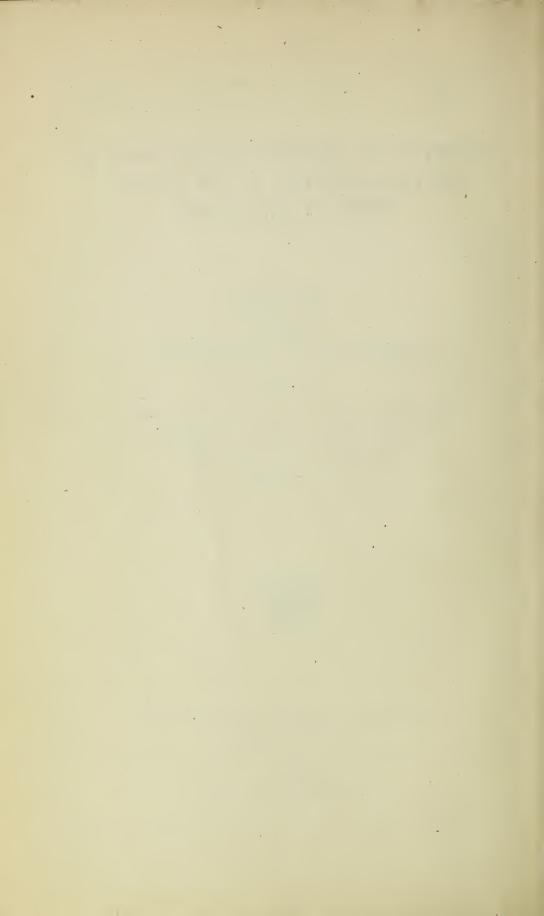
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## LETTER OF TRANSMITTAL.

DEPARTMENT OF AGRICULTURE, Washington, November 20, 1918.

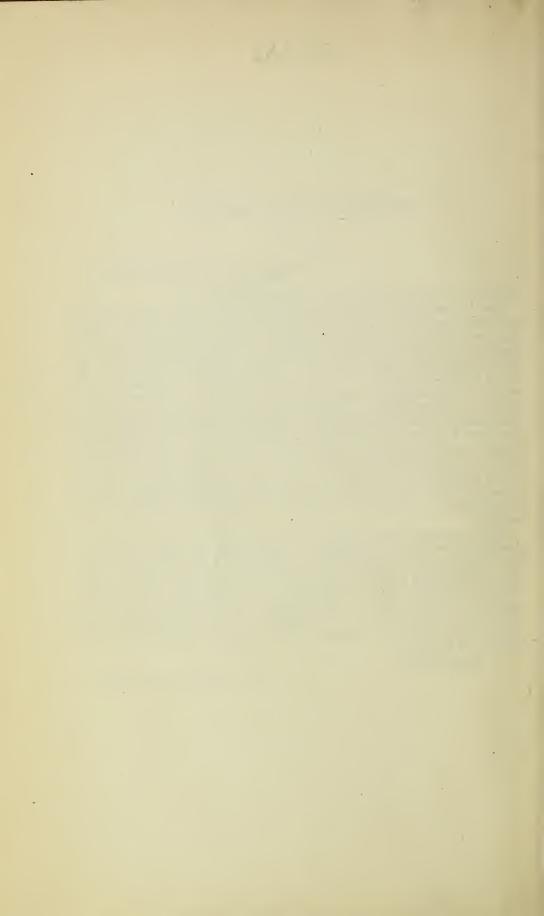
The Speaker of the House of Representatives.

Sir: In compliance with House resolution 379 I have the honor to transmit herewith a statement showing the number of men in the service of the Department of Agriculture who were, on June 5, 1917, between the ages of 21 and 31 years, for whom requests for deferred classification have been asked by the department and allowed, the name and home address of each such person, the character of the work he is performing, and the length of time he has been in the service. This statement includes those employees for whom deferred classification was recommended by the department and allowed by the draft boards and who are still in the service of the department. It does not include those employees in whose cases the draft boards did not act favorably upon the department recommendation for deferred classification or those in which the recommendation of the department for deferred classification was withdrawn because of later developments which made it possible to release the employees concerned.

The statement shows that 815 employees now in the service of the department were deferred solely on the ground that they are necessary to the adequate and effective operation of the service in which they are engaged and that they could not be replaced without substantial, material loss and detriment to the adequate and effective operation of such service. In addition, 248 employees for whom deferred classification was recommended by the department were also deferred for other reasons, such as dependency, physical disability, and the like.

Respectfully,

D. F. Houston, Secretary.



# EMPLOYEES IN THE DEPARTMENT OF AGRICULTURE EXEMPT FROM MILITARY DUTY.

#### WEATHER BUREAU.

OBSERVERS AND ASSISTANT OBSERVERS ENGAGED IN AEROLOGICAL WORK.

Deferred classification has been requested by the department and allowed by draft boards in the case of seven observers and assistant observers of the Weather Bureau engaged in Army aerological work provided for by a special appropriation of \$100,000 included in the regular Army appropriation act. This work is closely coordinated with similar activities of the Signal Corps of the Army and includes the making of upper-air observations in the aid of aviation and incidentally for the benefit of balloonists and artillerists. The work is of a highly technical nature, and the men engaged in it must not only be experienced in the handling of kites, theodolites, and other scientific apparatus, but must also have had intensive training and be skilled in the complicated mathematical work necessary in computing and reducing the observations. It would be impossible to replace these men without jeopardizing the work, as even if men with the necessary education and fundamental requirements were obtainable it would take many months of training for them to be able to accomplish what is required.

#### Observers and assistant observers.

-	oservers and assistant ooservers.	
Name and home address.	Character of work. (See also general statement.)	Length of service.
Frank J. Bavendick, Ellendale, N. Dak.	Has charge of the Army aerological station at Ellendale, N. Dak.	Yrs. Mos. 7 8
William S. Cloud, Washington, D. C.	Computer in office of official in charge of entire aerological work, Washington, D. C. Received university training.	3 0
Charles S. Ling, Drexel, Nebr John A. Reihle, Broken Arrow,	Assists in the Army aerological work at Drexel, Nebr Has charge of the Army aerological station at Broken	5 10 8 1
Okla. Orville E. Russell, Broken Arrow, Okla.	Arrow, Okla. Attended college 1 year. Assists in the Army aerological work at Broken Arrow, Okla. Attended college 1 year.	1 10
Chas. O. Schick, Groesbeck, Tex. Frank I. Whitney, Ellendale, N. Dak.	Assists in the Army aerological work at Groesbeck, Tex Assists in Army aerological work at Ellendale, N. Dak	5 8 3 10
Archie R. Dorr, Twin, Wash	Is an experienced line repairman and telegraph operator at Twin, Wash., on the Tatoosh-Port Angeles Weather Bureau telegraph line. The vessel-reporting stations of Neah Bay, North Head, and Tatoosh Island, Wash., are connected by this telegraph line. There is close and confidential cooperation between the Weather Bureau and the officials of the Army and Navy in connection with this work, and in some instances the bureau's telegraph and cable lines form the only means of communication for Army and Navy business in the important seacoast sections in which they are located. The repairmen along these lines, in addition to their knowledge of the topography of the country and their skill in construction and repair work, must be expert telegraphers; furthermore, they must be men who have demonstrated their loyalty and trustworthiness. Men who could fill their places are unobtainable.	6 11
Clement R. White, Cape Henry, Va.	Is an experienced telegraph line repairman at Cape Henry, Va. The Weather Bureau maintains a vessel-reporting station at Cape Henry with telegraph and cable line connections. There is close and confidential cooperation between the Weather Bureau and the officials of the Army and Navy in connection with this work, and in some instances the bureau's telegraph and cable lines form the only means of communication for Army and Navy business in the important seacoast sections in which they are located. The repairmen along these lines, in addition to their knowledge of the topography of the country and their skill in construction and repair work, must be expert telegraphers; furthermore, they must be men who have demonstrated their loyalty and trustworthiness. Men who could fill their places are unobtainable.	8 4

#### Observers and assistant observers—Continued.

Name and home address.	Character of work. (See also general statement.)	Length of service.
Walter F. Feldwisch, North Head, Wash.	Is an expert vessel reporter and telegraph operator at North Head, Wash, The Weather Bureau maintains a vessel-	Yrs. Mos. 7 3
W GSIL.	reporting station at North Head with telegraph and cable line connections. There is close and confidential cooperation between the Weather Bureau and the officials of the Army and Navy in connection with this work, and	
	in some instances the bureau's telegraph and cable lines form the only means of communication for Army and	
	Navy business in the important seacoast sections in which they are located. The vessel reporting can be done effectively only by men of long experience, as they	
	must be able to detect the name, nationality, and owner- ship of a vessel several miles distant; furthermore, they must be men who have demonstrated their loyalty and	1
	trustworthiness. Men who could fill their places are	
Oscar C. Rauh, Washington, D. C.	unobtainable. Employed as expert instrument maker in the Washington	10
	office and engaged in the construction of special and delicate apparatus required in the Army aerological	
	work. The instruments can not be obtained from manu-	
	facturers, and it is possible to employ only men of long training and exceptional skill in their construction and	
	repair. It would be impossible to fill this employee's place, as even in normal times only a few men were	4
	available and these have long since been absorbed in	
	branches of the Army and Navy for somewhat similar technical instrumental work.	
	Prior to appointment in Weather Bureau had 14 years'	
	training and experience in construction of delicate instru- ments with the firm of Buff & Buff, Boston, Mass.	
Joseph Leshansky, Sand Key, Fla.	This employee is an expert vessel reporter at Sand Key, Fla. The Weather Bureau maintains a vessel-reporting	3 8
ria.	station at Sand Key, with telegraph and cable connec-	
	tions. There is close and confidential cooperation be- tween the Weather Bureau and the officials of the Army	
	and Navy in connection with this work, and in some	
	instances the bureau's telegraph and cable lines form the only means of communication for Army and Navy	J
	business in the important seacoast sections in which	
	they are located. The vessel reporting can be done effectively only by men of long experience, as they must	
	be able to detect the name, nationality, and ownership of a vessel several miles distant; furthermore, they must	
	be men who have demonstrated their loyalty and trust- worthiness. Men who could fill their places are unob- tainable.	

#### BUREAU OF ANIMAL INDUSTRY.

#### VETERINARY INSPECTORS (MEAT INSPECTION).

The following veterinary inspectors engaged in meat inspection are graduates of recognized veterinary colleges and have qualified for the positions they hold through civil-service examination. After appointment they were given the usual instructions in meat-inspection work by trained employees. Through various assignments, every one has become proficient in this class of work. Their work consists of performing ante-mortem and post-mortem inspections for the purpose of passing carcasses, parts and organs that are healthful, wholesome, or fit for human food, and condemning those which are unhealthful, unwholesome, or unfit for human food; supervising the handling of meat and meat food products to insure compliance with the meat-inspection regulations; conducting sanitary inspection of establishments in which such inspections are conducted, especially the department to which thay are assigned; and attending to such other duties as may be required of them by the meat-inspection regulations and various instructors.

As a result of the present emergency, meat inspection has assumed a position of especial importance, as it is necessary to assure that the meat supplied to the Army, Navy, and the allies, and the civilian population of this Nation is healthful, wholesome, and fit for food.

Due to the fact that this service has lost a very large number of veterinary inspectors, it is necessary to conduct the work with a force which is composed of many new

employees who must receive much training before they can render the best service. Although all available veterinary inspectors listed by the Civil Service Commission have been appointed, as well as all veterinarians who would accept temporary appointment, there is a large number of vacancies in the ranks of veterinary inspectors. It is necessary that these employees be retained in the service in order that an adequate and effective service may be maintained.

		1	
Name and home address.	Length of service.	Name and home address.	Length of service.
E. M. Aldrich, Omaha, Nebr. Herman F. Baum, Brooklyn, N. Y. Arthur I. Bevan, Moultrie, Ga. Robert N. Birdwhistell, Cincinnati, Ohio. W. S. Buchanan, Chicago, Ill. Coleman P. Callaway, Fort Worth, Tex. R. J. Digman, Wausau, Wis. Guy P. Everley, South St. Joseph, Mo. Nathan Feldman, Chicago, Ill. Clyde A. Gardner, Brooklyn, N. Y. Charles H. Grunwald, South St. Joseph Mo. George J. Gruenewald, Cleveland, Ohio. Richard Harvey, Indianapolis, Ind. John W. Hermann, Pittsburgh, Pa. S. D. Hobbs, Jacksonville, Fla. Ray Hoefling, Austin, Minn Rush M. Johnson, Indianapolis, Ind. Howard M. Kalodner, Philadelphia, Pa. Lawrence P. Kirch, Indianapolis, Ind. Cecil S. Lemon, Augusta, Ga.	0 7 3 5 5 8 4 0 8 1 0 5 5 8 8 6 1 8 8 8 4 8 6 8 3 4 4 8 6 3 1 2	C. M. Lombard, Chicago, Ill. Robert L. Mason, Wheeling, W. Va. Frank W. Miller, Chicago, Ill. George E. Mitchell, Newark, N. J. Robert Moonan, Chicago, Ill. Charles E. Mootz, Wheeling, W. Va. James W. Norris, Boyd, Md. Hugh Max O'Rear, Indianapolis, Ind. Sabin L. Ries, Ottumwa, Iowa. Garrie W. Riley, Orangeburg, S. C. C. A. Schuler, Sioux City, Iowa Floyd A. Scott, Austin, Minn. Otto W. Seher, Fort Worth, Tex. Walter W. Shartle, Indianapolis, Ind. T. W. Stewart, South Sioux City, Iowa Martin A. Sweeney, Chicago, Ill. E. N. Tierney, Andalusia, Ala. Clemence C. Walch, Leavenworth, Kans. John G. Warwick, West St. Paul, Minn. John H. Whalen, Chicago, Ill.	0 11 9 6 6 2 8 4 6 4 5 1 3 2 6 1 3 8 7 2 3 10 3 8 6 8

#### LAY INSPECTORS (MEAT INSPECTION). .

The following lay inspectors engaged in meat inspection qualified for the positions they hold through civil-service examinations. Upon entering the service they were placed under seasoned and experienced employees to receive instructions in the conduct of the work. With the usual number of different assignments, they developed into efficient employees.

Their work consists of assisting veterinary inspectors in performing ante-mortem and post-mortem inspections; supervising the preparation of meat and meat food products; reinspecting meats during processing and after such processing is finished; passing such meats and meat food products as are clean, wholesome, and fit for food and to which no prohibited substances have been added, and retaining and condemning such as are unclean, unwholesome, or unfit for food or which contain prohibited substances.

no prohibited substances have been added, and retaining and condemning such as are unclean, unwholesome, or unfit for food or which contain prohibited substances. The work performed by this class of employees covers a most important part of the meat-inspection service, and there can be no question that the meat inspection as conducted by this department, especially under present conditions, is a highly necessary measure to insure the wholesomeness and fitness for food purposes of the meat supply and through it the health of the men in our Army and Navy, our allies, and the people of this country. A considerable number of this class of employees are now assigned to directly cooperate with the Army and Navy by assignment of Army camps, cantonments, forts, naval training stations, navy yards, and supply points to reinspect meat and meat food products and to supervise their delivery.

camps, cantonments, forts, naval training stations, navy yards, and supply points to reinspect meat and meat food products and to supervise their delivery.

Many of the most efficient lay inspectors have, within a comparatively short time, left the service, and it has been necessary, for the most part, to fill these vacancies with inexperienced men. All the eligibles certified for the position by the Civil Service Commission have been appointed, and every effort has been made to secure all possible men capable of doing this class of work and who would accept temporary appointment. Nevertheless, many vacancies have not been filled. Each of the men is performing a vital part of the inspection work, and the loss of any of them would result in materially lowering the efficiency of the service and would be difficult, if not impossible, to overcome.

Name and home address.	Length o	Name and home address.	Length of service.
Frederick H. Atkins, South St. Joseph, Mo. Clark M. Attebery, East St. Louis, Ill. Plato H. Boller, Salt Lake City, Utah. Orley R. Bourland, East St. Louis, Ill. William J. Brennan, Chicago, Ill. Thomas J. Brett, Somerville, Mass. Charles G. Carpenter, Moultrie, Ga. F. Clampitt, Sioux City, Iowa. Elmer H. Cole, Somerville, Mass. N. J. Cunningham, Chicago, Ill. Timothy F. Danforth, Chicago, Ill. Franklin O. Elmore, Wheeling, W. Va. Earl T. Farrington, East St. Louis, Ill. James J. Fitzpatrick, Chicago, Ill. F. T. Graskowiak, Omaha, Nebr. Martin F. Hanley, Indianapolts, Ind. Charles Harlow, Cincinnati, Ohio. Floyd Howard, Fort Worth, Tex. Robert Hunter, jr., Cincinnati, Ohio. Guy G. Jarvis, Peoria, Ill. William R. Kelly, Fort Worth, Tex. Patrick J. Kenny, Paterson, N. J. G. M. Lint, Chicago, Ill. Sumner B. McMasters, Austin, Minn. Myrtis A. Magee, Chicago, Ill. Jacob P. Maxwell, Omaha, Nebr. Oliver C. Miller, Mason City, Iowa. Ira S. Modrell, Wheeling, W. Va.	3 ( 9 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Edward Lee More, South St. Joseph, Mo. Daniel J. Murphy, Somerville, Mass. James A. Nelmes, Fall River, Mass. George W. C. Oehler, Ottumwa, Jowa August Patterson, Jacksonville, Fla. David P. Powell, Waterloo, Iowa Edgar P. Pulley, St. Joseph, Mo. Joseph V. Rollins, Austin, Minn W. R. Rose, Chicago, Ill. Frank I. Runnels, Mason City, Iowa Ray A. Schooley, Cincinnati, Ohio. William E. Seacord, East St. Louis, Ill. John T. Shelton, Chicago, Ill. Henry O. Singer, Chicago, Ill. Henry O. Singer, Chicago, Ill. William J. Small, South St. Joseph, Mo. James J. Smith, Fort Worth, Tex. Robert M. Spurlock, Fort Worth, Tex. Le Ray Stanley, Fort Worth, Tex. John Calvin Thompson, Chicago, Ill. Edward J. Toomey, Chicago, Ill. W. H. Voth, Sioux City, Towa. Carl H. Wagner, East St. Louis, Ill. Harry C. Whalen, Newark, N. J. Forrest F. Wynne, South St. Joseph, Mo.	5 2 3 8 7 4 11 3 6 6 9 9 2 7 7 1 1 9 6 10 4 6 6 1 1 9 6 10 4 6 3 3 3 2 11 6 4 4 2 8 9 8 9 9

#### VETERINARY INSPECTORS (TICK ERADICATION).

The following veterinary inspectors engaged in tick-eradication work are graduates of recognized veterinary colleges and have qualified for the positions they hold through civil-service examination. After appointment they were given the usual instructions in tick-eradication work by trained employees. They have been assigned to territories and have shown that they are capable of rendering efficient service.

territories and have shown that they are capable of rendering efficient service.

The eradication of ticks is a work of very great importance, as it has been positively shown that a tick-free section will produce more and better meat and better products than it would if infested with ticks. Congress itself has recognized the value of this work as a war measure by providing for the control and eradication of the diseases and pests of live stock, which includes the cattle tick, under the food-production act. To properly and successfully conduct this work, specially trained veterinary inspectors are required, such as those herein listed, as they are familiar through actual assignment with the sections in which the work is to be conducted.

To train new men requires considerable time. Furthermore, it is not believed possible to obtain new men for this work should the veterinary inspectors now attached to the service be removed, as there are no veterinary inspectors certified by the Civil Service Commission and no veterinarians in private practice are available who will accept temporary appointment. To lose any of these veterinarians, therefore, would materially embarrass the service and considerably retard this most valuable work.

Name and home address.	Length of service.	Name and home address.	Length of service.
Raymond A. Blackman, Whiteville, N.C. Theodore Brand, Rayville, La. Harold S. Brundage, Georgetown, S. C. John F. Chipman, Leesburg, Fla. Ashley J. Clark, Natchez, Miss R. E. Cropper, Green ville, Ga. Harry R. Getz, Mena, Ark. Walter J. Gray, Houma, La. Roy A. Gregory, De Witt, Ark. Jacob J. Jones, Pascagoula, Miss Albert H. Julien, Camilla, Ga. Arthur J. Knilans, Windsor, N. C. Cleo L. Lash, Bay St. Louis, Miss Carl E. Lipp, Leesville, La. George R. Louden, Oberlin, La. Lyman E. McDonald, Live Oak, Fla. Wilbur McPherson, Liberty, Miss.	1 2 8 8 6 2 7 1 6 3 10 5 3 2 3 3 3 0 1 6 6 3 3 3 2 8 8	Eugene E. Murphy, Franklin, La. Joseph S. O'Hare, Plymouth, N. C. Dudley B. Pellette, Colfax, La C. G. Rabenstein, Atlanta, Ga Ray V. Rafnel, Baton Rouge, La. Charles F. Rathbun, Pine Bluff, Ark John Redmond, Enterprise, Ala. Allen W. Rice, De Queen, Ark Floyd C. Reid, Arkadelphia, Ark. William R. Scott, Sulphur, Okla. William R. Scott, Sulphur, Okla. William Sevy, Covington, La. S. H. Still, Richland, Ga. Henry A. Taggart, De Land, Fla. Paul Vaughn, Montgomery, Ala Albert W. Vornheder, New Orleans, La. Clifford Young, McGehee, Ark	6 7 7 1 8 4 3 3 5 11 7 0 0 3 2 2 8 4 5 1 4 2 6 8 8 6 8 6 8

#### VETERINARY INSPECTORS (HOG-CHOLERA CONTROL).

The following veterinary inspectors engaged in hog-cholera control work are graduates of recognized veterinary colleges and have regularly qualified for the positions they hold through civil-service examination. After appointment they were given the usual instructions and training in hog-cholera control work by experienced employees.

They are all rendering satisfactory and efficient service.

The control of hog cholera is of vital importance in connection with the increased production of pork. Congress had recognized the value of this work as a war measure by providing funds for its prosecution under the food-production act. To obtain satisfactory results, experienced and specially qualified men must be employed. To train new men for this work requires much of the time of others who are experienced. The supply of veterinarians is practically exhausted. Consequently, the loss of any of these men would mean a reduction of the force.

Name and home address.	Length of service.	Name and home address.	Length of service.
Leslie H. Baker, Houston, Tex. Joe H. Bux, Little Rock, Ark. Amer C. Drach, Fort Dodge, Iowa. Joe Walter Giffee, Geneva, Nebr. Edgar A. Grubb, Sacramento, Cal. William M. Hobdy, Palestine, Tex. Frank B. Jones, Springfield, Mo. R. E. Moody, Eureka, Kans.	9 5 6 2 5 3 4 11 3 6 6 10	Frank Robert Jones, Fort Worth, Tex James Henry Murphy, Sullivan, Ind William Poseiner, Woodward, Okla Orion L. Summer, Upper Sandusky, Ohio. Charles T. Tawney, Corunna, Mich Fulton Rex Woodring, Chillicothe, Mo	11 8 4 2 1 5

#### VETERINARY INSPECTORS (TUBERCULOSIS ERADICATION).

The following veterinary inspectors engaged in tuberculosis-eradication work are graduates of recognized veterinary colleges and have regularly qualified for these positions through civil-service examination. After appointment they were given the usual instructions and training in this kind of work and are all now rendering very

satisfactory and highly efficient service.

These employees are engaged in the eradication of tuberculosis from the cattle herds of this country. The great importance of this work, especially at the present time, is apparent and has been recognized by Congress through provision of special appropriations under the food-production act for its more effective conduct. The stamping out of tuberculosis means enlarged meat and dairy production, besides conserving the supply now available. To conduct this work requires men who have received a special training and to lose any of the present inspectors would very materially cripple the service. This is especially true at this time since the supply of veterinarians is exhausted. It becomes especially necessary, therefore, that these men be retained in the service.

Name and home address.	Length of service.	Name and home address.	Length of service.
Emery E. Coshow, Indianapolis, Ind William C. Drake, Oklahoma City, Okla Solon Gillen, Madison, Wis	Yrs. Mos.  1 1 4 0 2 11	J. N. Holzer, St. Paul, Minn James Vernon Lyon, Chicago, Ill	Yrs. Mos. 4 8 3 10

VETERINARY INSPECTORS (SUPERVISION OF ESTABLISHMENTS MANUFACTURING SERUMS, TOXINS, ETC.).

The following inspectors are engaged in the supervision of establishments manufacturing biological products. After appointment they were given the usual instructions and training in supervising establishments manufacturing such products. They have become highly trained men in this branch of the work and are capable of render-

ing especially efficient service.

These employees supervise the production of serums, toxins, viruses, and other biological products, especially anti-hog-cholera serum. This supervision insures the production and distribution of safe and effective curative and preventive products. These products are employed in combating and controlling disease in meat-producing animals. The production of anti-hog-cholera serum in ordinary times is of great importance, but under present conditions it becomes of extreme importance in protection the supplies of parts of this country against less from disease. importance in protecting the supply of pork of this country against loss from disease.

Specially trained inspectors are required in order to properly supervise these establishments. They must fully understand all the details of the production of this class of products. To train men for this work requires much time, and, furthermore, the supply of veterinarians is practically exhausted.

Name and home address.	Length of service.	Name and home address.	Length of service.
Walter Boyce, Superior, Nebr. Charles P. Schneider, Indianapolis, Ind. Robert Thumann, Kansas City, Mo. John W. Woods, St. Joseph, Mo. Frank A. Bittner, Wichita, Kans.	5 3 8	Harry M. Edwards, Omaha, Nebr	4 3

#### VETERINARY INSPECTORS (DOURINE ERADICATION).

The following veterinary inspectors are engaged on dourine-eradication work. This work requires employees with considerable training and skill and is a class of work which can only be performed in a satisfactory manner by veterinarians. Owing to the scarcity of competent veterinary inspectors, it would be practically impossible to replace these inspectors if they were called into the military service, and it would cause a material loss to the horse industry to lose their services.

Name and home address.	Character of service.	Lengt of servic	
Melvin W. Miller, Albuquerque,		Yrs. M	fos. 4
N. Mex. John J. Staab, Albuquerque, N.		3	6
Mex. Burl O. Fisher, Harlem, Mont Ben H. Steigleder, Albuquerque, N. Mex.		1 1	8 6
Clarence N. Miller, East Las Vegas, N. Mex.	Engaged on sheep-scabies eradication work in New Mexico. This work requires men of considerable training and consists in the inspection of sheep for scabies, together with the supervision of the dipping of animals affected with or exposed to this disease. Sheep-scabies eradication work is very important at the present time, as the disease, if allowed to spread, will materially reduce the production of wool and mutton. It would be extremely difficult to fill the places of the men engaged on this work	5	9
Davis B. Allen, Calais, Me	were they called into active military service. Engaged in the work of inspecting live stock offered for importation from Canada. The regulations provide for the tuberculin testing of all dairy and breeding cattle from Canada. It is believed that tuberculosis is very common among pure-bred animals in Canada and it is important to maintain along the Canadian border a force of inspectors skilled in the work of inspection and in the application of the tuberculin test. The department is encouraging in every way possible the eradication of tuberculosis from herds of pure-bred animals in this country, and it would be most unfortunate at this time if, through a lack of competent inspectors or a relaxation of requirements, cattle infected with tuberculosis should enter the United States and disseminate tuberculosis in	3	1
George H. Ehlers, Scobey, Mont Earl L. Williman, Buffalo, N. Y	herds of pure-bred animals in this country.  do  Detailed to cooperative influenza-control work with the War Department. This work consists of supervising the cleaning and disinfection of stock cars, stockyards, barns, and other premises used in the handling of Army horses and mules. This class of work requires men of training along special lines, and the work accomplished has re- sulted in a material reduction in the losses of Army horses and mules through the decrease in the amount of infection from influenza. It would be practically im- possible to replace these men if they were called to ac-	4 3	6 2
	tive military service, and such action would seriously affect the conduct of influenza-control work.		
Max P. Medved, Kansas City, Kans.	do	6	7
E. D. Allen, Chicago, Ill	Assigned to stockyards work at Chicago, Ill. This work consists principally of the inspection of cattle, sheep, and swine for contagious, infectious, or communicable diseases. It requires training and skill.	8	8
Horace Brandon, Chicago, Ill	do	2	11

Name and home address.	Character of service.	Length of service.
Albert C. Osborn, Louisville, Ky	Assigned to stockyards work at Louisville, Ky. This work consists principally of the inspection of cattle, sheep, and swine for contagious, infectious, or communi-	Yrs. Mos.
James W. Murdoch, Omaha, Nebr.	cable diseases. It requires training and skill. Supervises the stockyards work at the Omaha, Nebr., station. Has under his direction about 20 employees engaged in inspecting animals for contagious diseases,	6 8
	engaged in inspecting animals for contagious diseases, such as foot-and-mouth disease, hog cholera, scables, anthrax, and glanders. These employees also apply the tuberculin test to cattle and supervise the immunization of swine for interstate movement for purposes other than immediate slaughter. Dr. Murdoch has had extended experience in contagious-disease work. The services of such experienced men are necessary to guard against outbreaks of serious contagious diseases in public stockyards.	
James E. Regan, New York, N. Y.	Employed in connection with the sanitary handling and control of hides, skins, hair, wool, and other animal byproducts offered for entry into the United States through the port of New York. In order to comply with the regulations requiring the disinfection of cars, boats, yards, and premises, it is necessary that a careful supervision be maintained. This can only be performed by men experienced in such work. In view of the prevalence of anthrax and the existence of foot-and-mouth disease and rinderpest in various countries, the regulations relative to the disinfection of hides, skins, or other animal by-products must be carefully administered. Great difficulty has been experienced in retaining inspectors in the service having the necessary qualifications for this work and their call into Army service would seriously	1 10
George Kernohan, Washington, D. C.	Employed in the bureau.  Employed in the bacteriological laboratories of the bureau in producing tuberculin and mallein. Through his training, and particularly his experience in the laboratories here, has become an expert in the propagation of tuberculosis and glanders bacilli used in preparing tuberculin and mallein, which is manufactured in great part for the use of the U.S. Army. This work, which involves the handling of virulent microorganisms, requires skill and reliability. Dr. Kernohan, with some assistance, is making all the glanders cultures that are needed to produce mallein for the Army.  Graduate Kansas State Veterinary College. Prior to	2 11
H. H. Ladson, Clarendon, Va	present appointment practiced veterinary medicine and was employed as inspector by Kansas State live-stock sanitary commission. Also served as veterinary inspector in the Bureau of Animal Industry at Kansas City and National Stockyards for 2 years; then took postgraduate course in bacteriology and served as instructor in general bacteriology at the University of Kansas.	3 3
Harry W. Schoening, Washington, D. C.	Graduate of a recognized veterinary college. Engaged as diagnostician of dourine and glanders, 2 of the most important diseases of equines, which it is imperative to control. Has developed expertness in serum diagnosis which comes only from years of actual experience in the work. These diseases are not possible of early detection in any other manner than by these tests. It would be impossible to dispense with Dr. Schoening's services at the present time without seriously jeopardizing the measures for the control of the diseases mentioned. He has also supplied material to the War Department for diagnostic work in glanders.	10 11
Benjamin Schwartz, Washington, D. C.	Graduate of a recognized veterinary college. Conducts important investigations concerning parasitic diseases of live stock, which work requires men specially educated and trained in zoology. His knowledge is required almost daily in giving information concerning the extermination and control of parasitic diseases of meat-producing animals, conditions which, if permitted to go uncontrolled, would result in serious loss. Great difficulty has been experienced in securing men qualified for this branch of work, and it is questionable whether any man could be found to take his place should he be called for military service.	2 9

Name and home address.	Character of service.	Length of service	
Benjamin Schwartz, Washington, D. C.	Graduate College of the City of New York, A. B.; also received A. M. degree from Columbia University, having specialized in zoology. Studied at the Cold Springs	Yrs. M	···
Samuel Adler, Kansas City, Mo	Pathological Laboratory 2 summers. Prior to present appointment was for nearly a year a scientific assistant in the Bureau of Fisheries and for 1 term was instructor in biology in the University of Arkansas.  Assists at the Kansas City meat-inspection laboratory in the examination of meats and meat-food products for harmful ingredients and to determine whether they are properly labeled. A large amount of the work during the past year consisted of the examination of samples of meat-food products prepared for military consumption	2	5
	to detect poisons. This is very important work and it is practically impossible to secure men trained along these lines. At the present time the eligibles for such positions are in the draft age, and even when appointed are only connected with the work a short time when they are inducted into the military service.  Graduate Alabama Polytechnic Institute, B. S. and M. S. in chemistry; also attended Columbia University of		
Walter F. Schroeder, New York, N. Y.	New York 2 summers.  Has charge of the fat and oil work in the New York meatinspection laboratory of this bureau. Has had a number of years' experience in this work and a new man appointed to replace him would require considerable time to gain the same proficiency. The bureau has experienced great difficulty in securing chemists and employees to do chemical work.	7	3
Winfield B. Fromer, Richmond Hill, N. Y.	Graduate Pennsylvania State College, B. S. Engaged in the examination, for many deleterious substances, of special military meat-food products. Has gained considerable proficiency in this work, and a new man appointed to take his place would require training before he could carry out this work satisfactorily. Graduate Syracuse University, B. S. Before entering the department service taught chemistry 2 years and served	4	3
Roger M. Mehurin, Washington, D. C.	1 year in a commercial laboratory. Performs analytical chemical work in the meat-inspection laboratory, specializing in the determination of heavy metals in meat-food products, in which work he has become an expert. It is impossible to secure men trained in this special line of work, and if any chemist was appointed to take his place it would require from 6 to 8 months' training in the laboratory before he could satisfactorily do the work.  Had 3 years' training in chemistry prior to his appointment in the bureau.	4	2

#### DAIRY FARMING EXTENSION AGENTS.

These men are employed jointly by the United States Department of Agriculture and the extension divisions of the various State agricultural colleges to conduct dairy farming extension work or to direct such work in the field. In the war emergency it is imperative that dairy production be maintained at its present level and even increased. These men are concentrating their efforts along the line of more economical production of milk and the utilization by means of the dairy cow of feeds which can not be used as human food. They are acquainted with the conditions and the people in their respective States and have their work outlined, and it would be a serious drawback if they were drafted, because there would necessarily be a break in the work before the vacancies could be filled and the new men become familiar with existing conditions. Furthermore, the Dairy Division has endeavored during the past year, with practically no success, to secure additional men sufficiently trained to do this work. Very few men of maturer years, or women either, are available whose training and experience fit them for this work.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.
Campbell A. Hutton, Knoxville, Tenn.	Graduate University of Tennessee, B. S. in agriculture; was assistant in dairying in that university 2 terms, had charge of dairy-herd record work at Tennessee ExperiStation, and was dairy editor of the University of Tennessee Farmer during this period. Prior to entering department service was assistant dairy and poultry agent	Yrs. Mos. 3 7
Frank M. Colcord, Corvallis, Oreg	for Southern Railway Co. for 2 years. Graduate University of Illinois, B. S., and University of Nebraska, M. S. Was emergency supervisor of county- agent work Nebraska in 1917.	10
H. T. Converse, Spartanburg, S. C.	Graduate New Hampshire College, B. S. Prior to entering department service engaged in farming 1 year; was herdsman and manager 2 years, and assistant in the dairy extension division of Clemson College 1 term.	3 2
Albert A. Fredericks, Baton	Graduate Louisiana State University, B. S	10
Rouge, La. Edward J. Haslerud, St. Paul, Minn.	Attended Minnesota College of Agriculture about 3 years.  Before entering department service was tester in a cowtesting association for 6 months.	8
W. L. Kellogg, State College, Pa	Graduate Pennsylvania State College, B. S. Was official	3 9
William E. Peterson, Manhattan, Kans.	in testing and cow-testing association work 1 year. Graduate University of Minnesota, B. S. and M. S. Was supervisor of garden work, public schools of Minneapolis, 1 year, and served with the dairy division of the Univer-	9
Joseph P. La Master, Starkville,	sity of Minnesota 1 year. Graduate University of Kentucky, B. S. Prior to entering	3 3
Miss.	department was bacteriologist for the Elmendorf Dairy.	
Harry G. Stevens, West Lafayette, Ind.	Graduate Ohio State University, B. S. in agriculture. Prior to entering department was employed as dairy herdsman.	1 10
Josephus P. Quinerly, Auburn, Ala.	Graduate North Carolina Agricultural and Mechanical College, B. S. Prior to entering department was foreman for Naval Academy Dairy, Annapolis, Md.; assistant dairy and poultry agent, Southern Ry. Co.; and manager, Elmview Farms, Grifton, N. C.	3 2
Walter E. Tomson, Bozeman, Mont.	Graduate Kansas Agricultutal College, B. S., and was assistant in dairy husbandry and instructor in dairy husbandry at that institution for 5 years.	8
J. A. Waldron, East Lansing, Mich.	Graduate Michigan Agricultural College, B. S. Prior to present appointment was for various periods herdsman at the college; instructor in agriculture high school, Carlton, Minn.: engaged in farming, and was extension worker in the Michigan Agricultural College.	1 11

#### CREAMERY EXTENSION SPECIALISTS.

The creamery extension specialists of the dairy division assist creamery operators in overcoming losses and in improving the quality of their product. They also teach them how to make use of the by-products, thus adding to the food supply of the country. There are very few men available who have the training and experience to qualify them to do creamery extension work. Hence, if any of the men now engaged in the work were drafted, it would be impossible to replace them with men having equal efficiency without considerable loss of time in training them to do the work. During the existing emergency it is essential that all dairy products be so handled that there will be no losses and that dairy production be maintained at its present level or even increased.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.
C. E. Newlander, Auburn, Ala W. F. Gerholz, Buhl, Idaho	Graduate Cornell University, B. S. For 4 years prior to entering department service was instructor in dairy manufactures, Michigan Agricultural College.  Attended Wisconsin Dairy School 1 term. Prior to present appointment was for 5 years employed as manager	Yrs. Mos. 1 1
Vern R. Jones, St. Albans, Vt	and maker of cheese for several companies. Graduate Washington State College, B. S., and was instructor in dairying at the college 1 term; post-graduate student, Cornell University, and instructor in dairying, 2 terms; received degree of M. S. in agriculture from Cornell; was assistant professor in dairying, South Dakota State College, 1 term.	1 1

Name and home address.	Character of work. (See also general statement.)	Length of service.
Owen E. Williams, Washington, D. C.	Engaged in investigating the manufacture of ice cream, one of the ways of converting dairy products into food. The work is essential. At present he is working on the substitution of glucose and similar products for cane sugar in ice-cream manufacture; also on the preparation of butter fat, so that it may be preserved and transported long	Yrs. Mos. 5 10
,	distances, the latter work having application to butter fat for reconstituting milk from skim-milk powder. It would be impossible to secure a man of his training and experience to take up this work. Graduate Kansas State Agricultural College, B. S. Was then employed for 1 year as instructor in charge of dairy husbandry at the Baron de Hirsch School, Woodbine, N. J.	
Edwin H. Krause, Lincoln, Nebr	Engaged in stimulating the production of cottage cheese from skim milk and buttermilk, which otherwise would be wasted. He is well trained for this work. Graduate Ohio State University, B. S. Then engaged in dairy farming 2 seasons.	9
T. C. Haddon, Rock Hill, S. C	Engaged in stimulating the production of cottage cheese.  He is well trained for this work.  Graduate Clemson Agricultural College, B. S. in agriculture. Prior to department service was teacher of agriculture and science 2 terms and assistant in agriculture, Winthrop Normal and Industrial College, 2 terms.	9
Albert C. Weimar, Washington, D. C.	Investigates the manufacture of cheese, attempting to develop methods of manufacturing types whose importation has been shut off by the war. His experience in this department also has qualified him for extension work. Graduate University of Wisconsin, B. S. in agriculture. Two years prior to entering department service was president of the Lacrosse Pasteurized Milk Co.	
Floyd R. Farnham, West Raleigh, N. C.	Engaged in cheese-factory extension work in the mountain regions of the South, inaugurated by the department about 4 years ago. Mr. Farnham has been instrumental in the organization of 20 cheese factories, some of which still depend on him in a large measure for advice and guidance and expert knowledge of cheese making. Cheese specialists are exceptionally scarce, and it would be very difficult to secure anyone to fill this position. Attended Pennsylvania State College; was instructor in creamery manufacture at that college 1 term and was butter maker there 1 term.	3 9

#### MARKET-MILK SPECIALISTS.

Market-milk specialists are engaged in work on the sanitation of milk supplies, Market-milk specialists are engaged in work on the sanitation of milk supplies, a most important matter in the conservation of human health as well as the conservation of dairy products. They cooperate with local authorities in teaching farmers how to produce more wholesome milk. This improvement enhances the keeping qualities of dairy products and prevents loss through spoilage. Practically their entire time during the past year has been devoted to cooperation with the United States Public Health Service in improving the milk supplies in the vicinity of Army cantonments. It would be practically impossible at this time to replace these employees. The Dairy Division has had unfilled vacancies in this work for nearly a year. Deferred classification has been requested by the department and allowed by draft boards in the following cases:

boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.
Harry N. Thomas, Washington, D.C. (in field greater portion of time).  Clarence S. MacBride, Washington, D. C. (travels all the time).  Russell S. Smith, Washington, D. C. (travels greater part of time).  Clifford W. Wescott, Patten, Me	(Nebr.) High School, 1916; county agricultural agent, Dawes County, Nebr., 1 season. Graduate University of Wisconsin, B. S. in agriculture. Prior to entering department was dairy instructor for State of Washington.	Yrs. Mos. 1 0  1 3 3 8

Mass.  Works chiefly on milk-plant management, dealing with city milk plants. The work reduces losses of milk due to wasteful methods and careless handling. It results in more wholesome milk being delivered to consumers. Graduate Massachusetts Agricultural College, B. S. For 2 years prior to entering department service was sanitain, chemist, and efficiency expert to Tait Bros. Springfield, Mass.  R. J. Posson, Washington, D. C. (in field greater portion of time).  H. P. Davis, Alexandria, Va	Name and home address.	Character of work. (See also general statement.)	Length of service.
Eigaged in collecting and tabulating data regarding milk production. Includes personal work with farmers to determine most economical methods of feeding and caring for darry cows. Results in a definite understanding as to the requirements in milk production.  H. P. Davis, Alexandria, Va		city milk plants. The work reduces losses of milk due to wasteful methods and careless handling. It results in more wholesome milk being delivered to consumers. It cuts down operating expenses by teaching more efficient use of machinery and labor.  Graduate Massachusetts Agricultural College, B. S. For 2 years prior to entering department service was sanitarian, chemist, and efficiency expert to Tait Bros.,	Yrs. Mos. 8
Graduate University of Nebraska, B. S. For a year and a half after entering department was engaged in dairy-extension work. Since that date has had charge of the editorial work of the dairy division. In addition, has charge of the feeding experiments at the Huntley (Mont.) Irrigation Experiment Farm, and at the Dorla (La.) Live Stock Experiment Farm, and at the Borla (La.) Live Stock Experiment Farm, and at the	R. J. Posson, Washington, D. C. (in field greater portion of time).	Engaged in collecting and tabulating data regarding milk production. Includes personal work with farmers to determine most economical methods of feeding and caring for dairy cows. Results in a definite under- standing as to the requirements in milk production and	2 10
Thomas W. Mosely, Washington, D. C.  Thomas W. Mosely, Washington, D. C.  I engaged in the organization of bull associations. The bull-association movement has for its object the improvement of dairy cattle through the joint ownership of meritorious pure-bred dairy bulls, and it has proved to be one of the most effective means of increasing the quality and productiveness of dairy cows. It is imperative during the war emergency that dairy production be maintained at the present level and even increased. This can best be done with better cows. The Bureau of Animal Industry for the past year has endeavored, with practically no success, to secure men sufficiently trained to do this work. Very few men of maturer years are available whose training and experience fit them for bull-association organization work.  Graduate University of Nebraska, B. S., in agriculture: graduate student, University of Chicago I summer, and assistant in the dairy laboratory of the University of Nebraska 2 terms.  Has charge of bull-association work in the West. This has for its object the improvement of dairy cattle through the joint ownership of meritorious pure-bred dairy bulls, and it has proved to be one of its most effective means of increasing the quality and productiveness of dairy cows. It is imperative during the war emergency that dairy production be maintainet at its present level and even increased. This can best be done by the improvement of the productive capacity of the cows of this country. It is difficult to secure men of maturer years whose training and experience fit them for this work.  Graduate Oregon Agricultural College, B. S. Was field dairyman for this college in cooperation with the Department of Agriculture for three years.  Has charge of darry extension activities of the Bureau of Animal Industry in the Middle West, supervising the work darry with the country has a difficult to high-class training, rare qualities for tact, judgment, and executive ability. Mr. Ellington has had special training and experience. V	H. P. Davis, Alexandria, Va	Graduate University of Nebraska, B. S.  For a year and a half after entering department was engaged in dairy-extension work. Since that date has had charge of the editorial work of the dairy division. In addition, has charge of the feeding experiments at the Huntley (Mont.) Irrigation Experiment Station, at the Ardmore (S. Dak.) Dry Land Experiment Farm, and at the Iberia (La.) Live Stock Experiment Farm.  Graduate University of Missouri; received master's degree from Pennsylvania State College; was assistant in dairy-	3 11
of Animal Industry for the past year has endeavored, with practically no success, to secure men sufficiently trained to do this work. Very few men of maturer years are available whose training and experience fit them for bull-association organization work.  Graduate University of Nebraska, B. S., in agriculture: graduate student, University of Chicago I summer, and assistant in the dairy laboratory of the University of Nebraska 2 terms.  Has charge of bull-association work in the West. This has for its object the improvement of dairy cattle through the joint ownership of meritorious pure-bred dairy bulls, and it has proved to be one of its most effective means of increasing the quality and productiveness of dairy cows. It is imperative during the war emergency that dairy production be maintainet at its present level and even increased. This can best be done by the improvement of the productive capacity of the cows of this country. It is difficult to secure men of maturer years whose training and experience fit them for this work. Graduate Oregon Agricultural College, B. S. Was field dairyman for this college in cooperation with the Department of Agriculture for three years.  Has charge of dairy extension activities of the Bureau of Animal Industry in the Middle West, supervising the work of 25 extension workers. This position requires, in addition to high-class training, rare qualities for tact, judgment, and executive ability. Mr. Ellington has had special training for this work through years of employment in this department. During the past year the bureau has had practically no success in securing men of this training and experience. Very few men of maturer years, or women either, are available whose training and experience.	Thomas W. Mosely, Washington, D. C.	mental dairy husbandry and instructor in dairy husbandry with Pennsylvania State College.  Is engaged in the organization of bull associations. The bull-association movement has for its object the improvement of dairy cattle through the joint ownership of meritorious pure-bred dairy bulls, and it has proved to be one of the most effective means of increasing the quality and productiveness of dairy cows. It is imperative during the war emergency that dairy production be maintained at the present level and even increased.	5 0
Has charge of bull-association work in the West. This has for its object the improvement of dairy cattle through the joint ownership of meritorious pure-bred dairy bulls, and it has proved to be one of its most effective means of increasing the quality and productiveness of dairy cows. It is imperative during the war emergency that dairy production be maintainet at its present level and even increased. This can best be done by the improvement of the productive capacity of the cows of this country. It is difficult to secure men of maturer years whose training and experience fit them for this work.  Graduate Oregon Agricultural College, B. S. Was field dairyman for this college in cooperation with the Department of Agriculture for three years.  Has charge of dairy extension activities of the Bureau of Animal Industry in the Middle West, supervising the work of 25 extension workers. This position requires, in addition to high-class training, rare qualities for tact, judgment, and executive ability. Mr. Ellington has had special training for this work through years of employment in this department. During the past year the bureau has had practically no success in securing men of this training and experience. Very few men of maturer years, or women either, are available whose training and experience.		of Animal Industry for the past year has endeavored, with practically no success, to secure men sufficiently trained to do this work. Very few men of maturer years are available whose training and experience fit them for bull-association organization work.  Graduate University of Nebraska, B. S, in agriculture: graduate student, University of Chicago I summer, and assistant in the dairy laboratory of the University of	
Graduate Oregon Agricultural College, B. S. Was field dairyman for this college in cooperation with the Department of Agriculture for three years.  Has charge of darry extension activities of the Bureau of Animal Industry in the Middle West, supervising the work of 25 extension workers. This position requires, in addition to high-class training, rare qualities for tact, judgment, and executive ability. Mr. Ellington has had special training for this work through years of employment in this department. During the past year the bureau has had practically no success in securing men of this training and experience. Very few men of maturer years, or women either, are available whose training and experience fit them for this work		Has charge of bull-association work in the West. This has for its object the improvement of dairy cattle through the joint ownership of meritorious pure-bred dairy bulls, and it has proved to be one of its most effective means of increasing the quality and productiveness of dairy cows. It is imperative during the war emergency that dairy production be maintainet at its present level and even increased. This can best be done by the improvement of the productive capacity of the cows of this country. It is difficult to secure men of maturer years	3. 9
special training for this work through years of employment in this department. During the past year the bureau has had practically no success in securing men of this training and experience. Very few men of maturer years, or women either, are available whose training and experience fit them for this work.	Elmer V. Ellington, Washington, D. C. (in field all the time).	Graduate Oregon Agricultural College, B. S. Was field dairyman for this college in cooperation with the Department of Agriculture for three years.  Has charge of darry extension activities of the Bureau of Animal Industry in the Middle West, supervising the work of 25 extension workers. This position requires, in addition to high-class training, rare qualities for tact, judgment, and executive ability. Mr. Ellington has had,	3 <b>2</b>
Joseph B. Shepherd, Ballston, Va.  Assists in the dairy extension office of the dairy division.  Attends to all inquiries regarding feeding, dairy-herd management, and selection of dairy cattle; also the construction of silos and dairy buildings.  Graduate University of Nebraska, B. S. in agriculture.	Joseph B. Shepherd, Ballston, Va.	special training for this work through years of employment in this department. During the past year the bureau has had practically no success in securing men of this training and experience. Very few men of maturer years, or women either, are available whose training and experience fit them for this work.  Graduate University of Missouri, B. S. in agriculture. For various periods was extension dairyman, assistant professor of dairying, and professor of dairying at the University of Idaho.  Assists in the dairy extension office of the dairy division. Attends to all inquiries regarding feeding, dairy-herd management, and selection of dairy cattle, also the con-	9

Name and home address.	Character of work. (See also general statement.)	Lengt	
G. E. Braum, Mount Vernon, Wash.	Engaged in collecting and tabulating data regarding milk production and in personal work with farmers to determine the most economical methods of feeding and caring for dairy cows. This work results in a definite understanding as to the requirements in milk production and	Yrs. A	
Ralph P. Hotis, Vergennes, Vt	leads to more economical methods of production.  Graduate Pennsylvania State College, B. S. prior to entering department service conducted practical dairy work in Somerset County, Pa.  Engaged in collecting and tabulating data regarding milk production and in personal work with farmers to determine the most economical methods of feeding and caring for dairy cows. This work results in a definite understanding as to the requirements in milk production and leads to more economical methods of production. Graduate Massachusetts Agricultural College, B. S. Served	1	3
Philip A. Wright, Washington, D. C.	for various periods before entering department as mana- ger of a stock farm, instructor in agricultural economics, Massachusetts Agricultural College, and dairyman for the Woodlake Stock Farm, Minneapolis, Minn. Performs analytical work in connection with silage in- vestigations, which includes particularly the utiliza- tion of new crops for silage. Has had long experience in	7	3
Roy R. Graves, Chevy Chase, Md.	this kind of work.  Graduate Middlebury College, B. A., student in Yale University 2 terms; also received degree of M. A., University of Missouri.  Engaged in investigations in the breeding of dairy cattle.  Has outlined and started some extensive experiments along this line. A number of animals of high butter-fat production have been secured, and it is expected that some valuable results will be obtained.	2	0
Paul W. Clemmer, Washington, D. C.	Graduate Kansas State Agricultural College, B. S.; received degree of M. S., University of Missouri. Prior to present appointment was manager of a dairy farm, dairyman in this department, and professor of dairy husbandry at Oregon Agricultural College.  Performs bacteriological work in connection with various dairy products. This work is conducted with a view to eliminate the waste of dairy products by spoilage and	3	0
Courtland S. Mudge, Washington, D. C.	to improve their quality.  Graduate Pennsylvania State College, B. S. Prior to entering department service was assistant chemist, Pennsylvania Experiment Station, and assistant bacteriologist, department of health, Cleveland, Ohio.  Performs bacteriological work in connection with various dairy products. This work is conducted with a view to		10
	eliminate the waste of dairy products by spoilage and to improve their quality.  Graduate Brown University, Ph. B., A. M., and Ph. D. Before entering department service was for various periods graduate instructor in biological chemistry at Brown University, instructor in chemistry at Rhode Island School of Design, Providence, R. I., and bacteriologist in the research laboratories of the National Canners'		
Clifford L. McArthur, Washington, D. C. (travels greater part of time).	Association, Washington, D. C. Performs bacteriological work in connection with various dairy products. This work is conducted with a view to eliminate the waste of dairy products by spoilage and to improve their quality. Graduate Oklahoma Agricultural and Mechanical College, B. S.; received degree of M. S. from the University of Idaho, and took summer course at the University of Chicago and post-graduate work at Rush Medical		31
Harper F. Zoller, Washington,	School. Was bacteriologist for the Oregon Agricultural College.  Is working on methods for making casein, suitable for glueing purposes in aeroplane construction from centralizer buttermilk, a product now largely wasted. The production of casein in this country must be increased about 50 per cent to meet the shortage due to the lack of imports and increased demand on account of aeroplane construction. It is almost impossible to secure chemists	1	1
	with proper training for this work.  Graduate Lenox College, B. S.; received degree of M. S. from University of Illinois. Before entering depart- ment was for various periods research assistant in astronomy and graduate assistant in chemistry in the University of Illinois; professor of physical sciences, University of Puget Sound; and instructor in organic chemistry, Kansas State Agricultural College.		
David D. Gray, Fort Collins, Colo.	Has charge of the horse-breeding work being conducted by this department in cooperation with the Colorado Ex- perimental Station at Fort Collins, Colo.	1	0

Name and home address.	Character of work. (See also general statement.)	Length of service.
David D. Gray, Fort Collins, Colo.	Graduate Kansas State Agricultural College, B. S. Prior to entering department had 1 year's experience in veterinary work.	Yrs. Mos.
V. O. McWhorter, Dubois, Idaho	Has charge of the sheep experiment station of the Bureau of Animal Industry at Dubois, Idaho, and has been connected with the work in sheep investigations for 4 years. During the past 3 years he has been trained especially to take charge of the range-sheep investigations project. These investigations have been underway for 9 years and are now yielding results of immediate value to the producers of wool and mutton in this country.	4 0
Sewall Wright, Washington, D. C	Graduate Washington State College, B. S. in agriculture. Has been employed in scientific work relating to animal egenetics; also is a thoroughly qualified mathematician and statistician and has been engaged during recent months in some extremely important statistical work bearing directly on war activities.  Graduate Lombard College, B. S.; received degree of M. S. from University of Illinois and S. D. from Harvard.	2 10
Ben F. Brandon, Beltsville, Md	Is assistant in charge of the animal husbandry portion of the experimental farm of the department at Beltsville, Md. His duties are those of farm superintendent, covering a wide range of farm activities. The experimental farm plays a fundamental part in the work of the animal husbandry division and naturally is vitally connected with the war emergency program.  Graduate Purdue University, B. S. in agriculture. Had practical farm experience prior to entering department.	2 0

#### SPECIALISTS IN SWINE PRODUCTION.

The department is making every effort to increase the production of pork in the United States. An intensive campaign is now under way in the eight corn-belt States, where many farmers have begun raising hogs for the first time. In the Southern States additional men, appointed under the authority conferred by the food-production act, have been placed as assistants to the regular force of swine-husbandry agents to stimulate production of pork and to increase the pig-club membership. The importance of this work is manifest in view of the fact that pork constitutes more than one-half of all the meat produced in this country and is the mainstay in the ration of the laboring man and the soldier. The need for increasing the supply of fats is particularly acute. Animal fats can be increased more quickly by increasing the number of hogs than in any other manner.

Deferred classification has been requested by the department and allowed by

draft boards in the case of the following employees engaged in this type of work:

attended in the case of the following employees engaged in this type of world			
Name and home address.	Character of work. (See also general statement.)	Length servic	
		Yrs. M	roe.
John T. Tingle, Fort Collins, Colo.	Graduate Mississippi Agricultural and Mechanical College, B. S. in agriculture; served 1 term as principal of agri-	1 70.11	8
Tom F. Wise, Auburn, Ala	cultural high school.  Graduate Iowa Agricultural College, B. S. in agriculture; also had farm experience.		8
Wm. E. Schneider, Denver, Colo	Graduate Colorado Agricultural College, B. S. in agri- culture.		8
Leonard J. Allen, Corvallis, Oreg.	Graduate Oregon Agricultural College, M. S. As a pig- club agent has been instrumental in accomplishing valuable results.	. 2	9
DeWitt T. Meek, Stillwater, Okla.	Prior to entering department had considerable practical experience with live stock, and for a time was secretary of the Federal Live Stock Association of Oklahoma.	2	6
Charles R. Bowers, Auburn, Ala	Graduate Oklahoma Agricultural and Mechanical College, B. S. in agriculture; took postgraduate work in animal husbandry.		8
Peter E. Spinks, Agricultural College, Miss.	Graduate Mississippi Agricultural and Mechanical College, B. S. in agriculture.	1	0
Lewis H. Fudge, St. Paul, Minn	Graduate Ohio State University, B. S. in agriculture	1	0

#### SPECIALISTS IN BEEF-CATTLE PRODUCTION.

Beef-cattle production is one of the most important lines of work of the Bureau of Animal Industry. Specialists have been placed in different sections of the country to assist farmers and cattlemen in conserving all good breeding cows and to emphasize the necessity of breeding for a maximum calf crop, preparing permanent pastures, building silos, and preserving all available feedstuffs. The corn-belt possesses an

enormous supply of feed in its corn fodder which has never heretofore been completely utilized. It is estimated that there is in the Southeast this year sufficient feed to take care of between 400,000 and 500,000 cattle in addition to the number normally provided for. Many problems in beef-cattle production require investigation by specially qualified experts, and it is generally recognized that the experimental work conducted by this department has been the basis of the great development of the beef-cattle industry in the South following the eradication of the cattle tick.

Deferred classification has been requested by the department and allowed by

draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Lengt	
Gilbert L. Cleland, Canton, Miss	Graduate Kansas Agricultural College. Prior to present appointment had practical farm training and I year's experience in swine and beef-cattle production work.	Yrs. M	Ios. 6
L. W. Summers, Orangeburg, S. C.	Graduate Alabama Polytechnic Institute; acted as in- structor in the Agricultural College of Virginia, and pre- vious to entering the department service was engaged in farming in South Carolina.	2	0
F. T. Peden, Springdale, N. C	Graduate North Carolina College of Agriculture. Has had practical farm experience.	4	8
Smith W. Greene, Collins, Miss	Graduate Purdue University. Had practical farm experience before entering department.	1	5
Frank W. Farley, Washington,	Graduate University of Illinois, B. S.	3	0
Carrol J. Goodell, Washington, D. C. (travels in field most of time).	Graduate Purdue University, B. S. in agriculture. Spent his early life on a farm and managed a farm for 5 years prior to entering department service.	3	10

#### SPECIALISTS IN POULTRY PRODUCTION.

The work upon which these employees are engaged offers one of the quickest means of increasing the meat supply of the country. The production of a large supply of poultry and eggs for domestic consumption will result in releasing greater quantities of beef and pork for the use of our Army and the allies. Every effort is being made to encourage the production of poultry on general farms and in back yards in order to turn waste material into food for human consumption. These specialists work in respectively with the State agencies and have been giving chief extention to the great turn waste material into food for human consumption. These specialists work in cooperation with the State agencies, and have been giving chief attention to the great poultry-producing sections of the Middle West, which presents the greatest opportunity for securing the largest and most immediate results. As a necessary concomitant of these extension activities, studies are also being made of various problems relating to the feeding, breeding, and management of poultry.

Deferred classification has been requested by the department and approved by draft boards in the case of the following employees engaged in this work:

Name and home address.	Character of work. (See also general statement.)	Length of service.
Alfred R. Lee, Bladensburg, Md	Graduate Rhode Island State College, B. S. in agriculture. Has general supervision of the poultry feeding experiments at the Beltsville farm in connection with the war emergency work and the administrative work in the Washington office.	Yrs. Mos. 8 9
R. C. Blake, Oklahoma City, Okla.	Graduate Massachusetts Agricultural College, B. S. in agri- culture. Has had wide experience in the management of poultry farms.	7
R. H. Wilkins, Washington, D. C.	Graduate Illinois State University and Cornell University. Was poultry instructor and investigator and in Massachusetts and Kentucky for 2 years prior to present appointment.	10
Leo J. Brosemer, Lafayette, Ind	Prior to present appointment was manager of a commercial poultry plant, poultry-club agent for the department in Tennessee, and associate editor of the Reliable Poultry Journal.	2 4
Carl F. Weihman, Bryan, Tex	Attended Pennsylvania State College 3 years, specializing in poultry. Had 3 years' practical experience in farming and poultry breeding.	8
Philip H. Hayes, Stillwater, Okla.	Graduate Oklahoma Agricultural and Mechanical College, B. S. in agriculture. During his college course did considerable work on the poultry farm in connection with the feeding, care, incubation, and other matters relating to poultry production.	9
Sheppard Haynes, Beltsville, Md	Assists in poultry work being conducted at the Beltsville Farm. The poultry experimental work at the farm is a vital part of the emergency war program because of its bearing upon the poultry industry of the country. Prior to entering department service had about 10 years' practical experience in feeding, breeding, and management of poultry.	1 5

#### FOREST SERVICE.

#### FOREST SUPERVISORS.

A forest supervisor is in direct administrative charge of one or more national forests, with an average area to look after of more than 1,000,000 acres. He has control of a ranger force of from 5 to 20 men and is responsible for their training, leadership, direction, and support. He negotiates all timber sales for his forest, except those of small size, which are handled by the rangers, and those of very large size, which are handled by the district forester or the Forester. After sales are negotiated he is responsible for their administration. He plans and supervises trail, telephone, and other improvements for his forest. He issues grazing and special-use permits and is responsible to the public, to his ranger force, and to the district forester for the efficient handling of a large volume of business. All funds on the national forests are expended under the immediate direction of the forest supervisor, necessitating an accurate grasp of the fiscal regulations. He is expert in both office and field work. A supervisor within draft age, in many instances, is technically trained for his work. During the war especially heavy duties devolve upon him because, with a depleted subordinate force, he is under the necessity of efficiently handling as large a timber business as before the war, and a greatly increased grazing business, since it has been the effort throughout the national forests to increase the grazing to the utmost limit in order to augment the country's supply of meat. In every case where deferred classification for a forest supervisor has been requested there are special considerations which make it impossible to replace him without substantial, material loss and detriment to the work.

Deferred classification has been requested by the department and allowed by draft

boards in the following cases:

			-
Name and home address.	Character of work. (See also general statement.)	Lengt	
Edward P. Ancona, Taos, N. Mex.	uate Pennsylvania State College, B. S. Employed 1 summer on State forest in Pennsylvania and about a year on chestnut-blight work in same State. Entered Forest Service in a reconnoisance party on the Snoqual-	Yrs. A	
Elliott S. Barker, Taos, N. Mex	mie Forest.  Forest supervisor, Carson National Forest. Graduate New Mexico Normal University; also 6 months in Illi- nois College of Photography. During school vacations worked at ranching and sawmilling. Entered Forest Service as assistant forest ranger.	9	5½
Charles N. Hammond, Hot Springs, Ark.	Deputy forest supervisor, Arkansas National Forest. Graduate Pennsylvania State College, B. S. in forestry. Prior to appointment was employed by the Pennsylvania chestnut-blight commission, and also assisted in a timber reconnoissance on the Crater Forest.	4	4
B. F. Heintzleman, Eugene, Oreg.	Deputy forest supervisor, Cascade National Forest, with all qualifications for filling any supervisor vacancy that may occur in district 6. Graduate Pennsylvania State Forest Academy; 2 years Yale Forest School. For 1 year in charge of State forest reservation in Pennsylvania. Prior to present appointment employed as forest guard on Kaniksu Forest.	8	3
Jay Higgins, Halsey, Nebr	Forest supervisor, Nebraska National Forest. Graduate University of Nebraska, B. S. in forestry. Entered Forest Service as a guard on 1 of the Colorado forests. Prior to appointment had experience in sawmill and nursery work.	10	1
Arthur F. C. Hoffman, Pagosa Springs, Colo.	Forest supervisor, San Juan Forest. Graduate Iowa State College, B. S. in forestry. During the summer of 1909 engaged in timber estimating, mapping, planting, and collecting data for volume and yield tables. During the summer of 1910 employed by the Forest Service as student assistant, being engaged in extensive timber reconnoissance on the White River Forest.	7	$2\frac{1}{2}$
Leslie T. Mahurin, Glenwood Springs, Colo.	In addition to handling a large amount of administrative work on the Holy Cross National Forest, assumes many responsibilities comparable to those of a deputy super- visor.	6	4
Charles D. Simpson, Montpelier, Idaho.	Forest supervisor, Caribou National Forest. Graduate 4-year course in forestry, University of Minnesota, spe- cializing in botany and economics, and special course in stock judging, veterinary science, and agronomy. Had previous practical experience in stock raising; also worked as forest guard in the employ of the Minnesota State forestry service.	4	11½

Name and home address.	Character of work. (See also general statement.)	Length of service.
John W. Spencer, Collbran, Colo  James C. Whitham, Miles City Mont.	Forest supervisor, Battlement National Forest. Graduate Emporia College (Kans.), B. A., Yale Forest School; M. F. Entered Forest Service as a field assistant on the Crook Forest. Prior to appointment had experience in timber cruising, mapping, and surveying. Forest supervisor, Sioux National Forest. Graduate Iowa State College, B. S., specializing in forestry. Entered Forest Service as a forest guard.	

#### DISTRICT FOREST RANGERS.

A district forest ranger is responsible for protecting from fire one or more districts of a national forest, usually involving an area of from 100,000 to 250,000 acres. In most instances privately owned lands are intermingled with the Government holdings. The district ranger conducts with the public the business arising on his district, including timber sales, the management of grazing, special uses of various sorts, and the free use of timber. He frequently has one or more assistants on timber-sale work, and in the fire season he may have as many as three or four patrolmen working under his direction. In fighting fires he may suddenly be thrown into the control of from 100 to 300 men. The success of a district ranger depends upon a number of factors, important among which are complete knowledge of his district, including the location of corners and land lines dividing private from Government lands, and wide acquaintance with the local people. In some instances a man may be so highly qualified for his place that he can not be replaced without the most serious detriment to the business of the forest and annoyance to the local public. It is of the utmost importance that at least 50 per cent of the district rangers on any forest be experienced men, since it is hazardous to depend upon inexperienced men for more than half the ranger districts. In all cases where affidavits were filed for district rangers it was because of the conditions above indicated.

Deferred classification has been requested by the department and allowed by

draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.
		Yrs. Mos.
Wayne F. Alexander, Livingston, Mont.	Forest ranger, West Boulder ranger district, Absaroka National Forest. Attended a short course in forestry at Missoula and business college. Entered the Forest Service as a guard. Had previous experience in logging camps and in handling horses.	5 2
Karl C, Allan, Kilgore, Idaho	Forest ranger, district 2, Targhee National Forest. Prior to entering the Forest Service had considerable experience in stock raising.	4 9
Chas. E. Brackett, Nicholia, Mont.		7 0½
James P. Brown, Silver Bow, Mont.	Forest ranger, Fleecer district, Deerlodge National Forest. Graduate Pennsylvania State College, B. S. in forestry. Worked in nursery for Pennsylvania R. R. Co.; also experience in tree planting in West Virginia.	5 0
William F. Cochran, Columbine, Colo.	Forest ranger, Three Forks ranger district, Routt National Forest. Prior to present appointment was employed 3 summers as temporary laborer and fire guard in the Forest Service. Had previous experience in surveying.	3 01/2
Charles K. Cooperrider, Cowles, N. Mex.	Forest ranger, Panchuela-La Mesa ranger district, Santa Fe National Forest. Graduate Ohio University, B. S. Taught 3 years in high school, 1 year in college, and served 1 year as high-school principal. Entered the	2 11½
Fred W. Croxen, Winslow, Ariz	Forest Service as assistant forest ranger. Forest ranger, Bly ranger district, Coconino National Forest. Short course in forestry and animal husbandry at Iowa Agricultural College. Entered Forest Service as an assistant forest ranger. Had previous experience	6 10
John C. Davis, Alturas, Cal	in cattle ranching, lumbering, and tree planting. Forest ranger, Devil's Garden district, Modoc National Forest. Was forest guard 1 summer before permanent appointment. Prior to appointment had practical	2 10

experience in stock raising.

Name and home address.	Character of work. (See also general statement.)	Length of service.
Walter W. Douglas, Merrimac, Cal.	Forest ranger, Merrimac district, Plumas National Forest. Had practical experience in building cabins, trails and roads, and telephone lines, and in timber cruising before entering service; also in handling cattle, both on sum-	Yrs. Mos. 4 8
William B. Fay, Hesperus, Colo	Forest. Had experience in road surveys and road work and in handling stock. Entered Forest Service as a	4 6
Leland Fouts, MacFarland, Tenn	guard. Assistant forest ranger, Hiawassee ranger district, Chero- kee-Georgia Purchase Area. Served as guard in Forest Service 2 years before permanent appointment and had	4 5
Frank Gray, Cedar, Colo	prior experience in lumbering. Forest ranger, Glade ranger district, Montezuma National Forest. Attended State Normal, Alva, Okla., 1 year, and State Normal, Springfield, Mo., 1 year, and after- wards taught school. Prior to entering the Forest	2 2
James I. Hatch, Gallina, N. Mex	Service had experience in stock raising.  Forest ranger, Gallian ranger district, Santa Fe National Forest. Entered Forest Service as a forest guard.  Prior to appointment had practical experience in lum-	5 4
Harry D. Hauser, South Pass, Wyo.	bering. Forest ranger, Washakie National Forest. Served as field assistant and as guard in the Forest Service before permanent appointment. Had previous sawmill experience.	3 7
William E. Hedges, Natural Bridge Station, Va.	Forest ranger, South Side ranger district, Natural Bridge Purchase Area. Employed on ranger duties since en- tering Forest Service. Prior to appointment had experi- ence in surveying, lumbering, handling stock on range,	2 3
Louis R. Hillmon, New Meadows, Idaho.	and sawmilling	6 0
Wm. E. Jackson, Denver, Colo	Forest ranger. Attended Anaconda (Mont.) College 4 years; United States Naval Academy, 2 years; Kansas State University, 2 years; University Forest School,	5 7
Wallwin T. Job, Kanab, Utah	2 years.  Forest ranger, Kaibab National Forest. Prior to appointment worked with surveying party and in surveyor's office approximately 6 months; also had 10 months' experienced in such and the survey of the sur	8 9
Robert Johnson, Wensper, Idaho.	perience in ranch work. Forest ranger, district 1, Lemhi National Forest. Pre-	3 8
John V. Leighton, Dolores, Colo	vious experience on cattle ranch.  Forest ranger, assigned to timber-sale work on Montezuma National Forest. Attended Bloomsburg (Pa.) State Normal 1 year; Bucknell University 2 years; Pennsylva- nia State College 3 years, graduating B. S. in forestry. Prior to appointment to present position had lumbering experience and worked in a reconnoissance crew on Big-	5 2
Harvey J. Lickel, Trout Lake, Wash.	horn Forest.  Forest ranger, Mount Adams ranger district, Columbia National Forest. Attended South Dakota State Normal School 3½ years; Oregon Agricultural College 2½ years; University of Washington, ranger's short course in forestry. Was reared on a stock farm; entered Forest	7 10
Benj. H. Lowe, Moon, S. Dak	Service as a forest guard.  Forest ranger, Limestone ranger district, Harney National Forest. Entered Forest Service as a guard. Had pre- vious experience in lumbering.	2 9
Corley B. McFarland, Landax, Oreg.	Forest ranger, West Boundary ranger district, Cascade National Forest. Graduate Southern Iowa Normal School. Had stock-raising, logging, and lumbering experience prior to Government employment. Entered Forest Service as forest guard and has been employed on per-	8 3
Neal O. McKinley, Rye, Colo	Forest ranger, Greenhorn ranger district, San Isabel National Forest. Entered Forest Service as guard. Had	2 6
Woodfred Grady Miller, Imnaha, Oreg.	previous experience in lumbering. Forest ranger, Imnaha ranger district, Wallowa National Forest. Had experience in sheep raising and sawmill work prior to entering department service; appointed to Forest Service as a forest guard.	5 1
Sanford Mills, Dubois, Wyo	to Forest Service as a forest guard.  Forest ranger, Washakie National Forest. Lived on ranch until entering Forest Service and was experienced in handling live stock.	5 8
George E. Moore, Currant, Nev	Forest ranger, district 3, Nevada National Forest. Three years at Utah Agricultural College. Prior to appointment had general sawmill experience.	2 7
Stephen A. Nash-Boulden, Des- canso, Cal.	Forest ranger, Descanso district, Cleveland National Forest. Experienced in grazing and ranching. Served as forest guard for 1 summer before permanent appointment. Has been a forest ranger during entire period in service.	4 5

		the second	
Name and home address.	Character of work. (See also general statement.)	Lengt	
Rosco C. Nicholson, Clayton, Ga.	Forest ranger, Clayton ranger district, Savannah Purchase Area. Attended Georgia Agricultural College, business course 1 year, mining and engineering course 2½ years. Served in Forest Service 2 summers as forest guard be-	Yrs. 1	
Berry W. Phelps, Fraser, Colo	fore permanent appointment.  Forest ranger, Byers district, Arapaho National Forest.  Two years at Gates Academy, Neligh, Nebr., scientific course; course in surveying and mapping, International Correspondence Schools. Had considerable experience in logging operations and at sawmills, also in handling	1	5
Frank F. Foley, Sulphur Springs, Colo.	stock previous to entering Forest Service.  Forestranger, Arapaho National Forest. From spring of 1910 to fall of 1914 employed as temporary laborer, fore- man of planting crews, and forest guard in the Forest Service.	5	$3\frac{1}{2}$
Robert G. Schreck, Ely, Minn	Forest ranger, Superior National Forest. Graduate Iowa State College, B. S. in forestry. Prior to permanent ap-	3	$7\frac{1}{2}$
Joseph L. Sheppard, Evanston, Wyo.	pointment worked for 4 summers as forest guard.  Forest ranger, employed on important timber sale operations on Wasatch National Forest. Previous to entering	3	2
Lionel H. Sherman, Dayton, Wyo.	Forest Service had experience in handling live stock. Forest ranger, Tongue ranger district, Bighorn National Forest. Entered Forest Service as a forest guard. Pre-	4	6
I. M. Varner, Soda Springs, Idaho.	vious experience in handling live stock. Forest ranger, district 8, Cache National Forest. Attended University of Idaho 2 years. Prior to appointment had 9 years' experience in iumbering, also experience in sur- veying. Was forest guard 2 summers before permanent	3	7
Henry G. White, Detroit, Oreg	appointment in Forest Service.  Forest ranger, Detroit ranger district, Santiam National Forest. Since entering Forest Service has been engaged chiefly in trail and telephone construction, scaling, and fire protection.	7	11/2
Norman C. White, Bly, Oreg	Forest ranger, Bly ranger district, Fremont National For- est. Practical experience in surveying prior to entering Forest Service, where he has been employed as forest	6	51/2
Arthur A. Wood, Lost City, W. Va.	guard, chiefly ón grazing and timber work.  Forest ranger, Potomac ranger district, Shenandoah Purchase Area. Entered Forest Service as a forest guard.  Prior to appointment had practical experience in stock raising.	5	2

#### FOREST EXAMINERS.

A forest examiner is a technically trained forester who is assigned to a national forest to assist the supervisor in estimating timber, in laying out and making timber sales, and in the administration of sales after they are negotiated. He assists in all other forest operations and activities, such as planting and all manner of special forest studies, and also assists in the general administration work as the need may arise. The forest examiner is the supervisor's technical expert in timber matters. If assigned to a district office, a forest examiner is usually employed on special timber work, such as general timber reconnaissance, or the study of silvicultural problems, or he may be assigned from forest to forest for work under the direction of the forest supervisor. So large a proportion of the forest examiners formerly in the Forest Service have entered the military service that it would be impossible to replace any of the men for whom deferred classification has been requested without equivalent loss in some other direction.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.
R. H. Easterbrooks, Laramie, Wyo.  Oliver F. Ericson, Austin, Oreg	Forest examiner, engaged in timber-sale work on the Medicine Bow Forest. Attended University of Illinois 1 year, University of Michigan 4 years. Had previous experience in lumbering, surveying, tree planting, timber cruising, and fire fighting.  Forest examiner, Whitman National Forest. Graduate Bethany College (Kans.), A. B.; University of Washington (Wash.), M. S. in forestry. Before entering service was employed during school vacations on forest recon-	Yrs. Mos. 2 5½ 5 2

naissance work.

Name and home address.	Character of work. (See also general statement.)	Length of service.
Andrew Hutton, Laramie, Wyo	Forest examiner, assigned to timber-sale work on the Rio Grande National Forest. Graduate Pennsylvania State College, B. S. in forestry. Was employed 2 summers by forest park reservation commission of New Jersey, surveying boundary lines, marking lines, locating corners, cabin buildings, etc.	Yrs. Mos
B. E. Leete, Custer, S. Dak	Forest examiner. Graduate Yale, B. A., and Yale For-	2 11
Allen W. Murdock, Hot Sulphur Springs, Colo.	est School, M. F. Forest examiner, Arapaho National Forest. Graduate University of Michigan, A. B., and M. S. in forestry. Spent college summer vacations 2 years as fire warden in Michigan and 1 year as field assistant on Whitman Forest.	4 2
Wallace J. Pearce, Fort Collins, Colo.	Forest examiner, Colorado National Forest. Attended Colorado College 2 years. Engaged in trail, telephone, and fire-guard work. Entered Forest Service as an assistant on the Pike Forest nursery.	4 1
Ward Shepard, Albuquerque, N. Mex.	Forest examiner, district office, Albuquerque, N. Mex., assisting the chief of operation. Graduate Harvard, A. B., and Harvard Forest School, M. F. Entered Forest Service as forest assistant.	5 0
Edwin H. Steffen, Yreka, Cal	Forest examiner, in charge of silviculture activities on Modoc Forest. Graduate Iowa State College, B. S. in Forestry. Prior to present appointment served in For- est Service as guard and as forest assistant in technical forest work.	5 6
Charles Steuart, Mancos, Colo	Forest examiner, Montezuma National Forest. Graduate Colorado College, F. E., and Yale Forest School, M. F. Entered Forest Service as a field assistant. Had previous experience in timber cruising.	4 1
Myron W. Thompson, Denver, Colo.	Forest examiner, in charge of the office of silviculture (Denver), substituting for regular incumbent, now on military leave in France; only experienced man available with complete knowledge of timber-sale conditions of district 2. Graduate Massachusetts Agricultural College, B. S., and Yale Forest School, M. F. During college vacations worked in forestry field parties. Entered Forest Service as forest assistant.	6 11
Earl W. Tinker, Deadwood, S. Dak.	Forest examiner, Black Hills National Forest. Graduate Michigan Agricultural College, B. S. in forestry; Yale Forest School, M. F.	2 11
Ernest T. Wolf, Cody, Wyo	Forest examiner. Graduate Iowa State College, B. S. in forestry. Prior to permanent appointment served 1 summer as field assistant in Forest Service. Had previous practical experience in woods and lumber yards.	4 0

#### GRAZING EXAMINERS AND GRAZING ASSISTANTS.

Grazing examiners and grazing assistants are technically trained grazing experts. When assigned to a national forest they make an expert examination or survey of the range resources, the range allotments to different classes of stock, and the methods followed in handling the stock on the range, and recommend changes in numbers of stock, class of stock, methods for their handling, and needed range improvements, in order to eliminate destructive overgrazing or unnecessary undergrazing throughout the forest. Where important changes in grazing management are necessary, following the survey, the grazing examiner or grazing assistant assists the supervisor in seeing that they are properly made. If assigned to a district office, he serves as the district forester's technical expert on the grazing capacity of ranges and methods of range utilization. When assigned to research he collects data and develops improved methods of range management for application in range administration. Grazing examiners and grazing assistants may be assigned from forest to forest, from forest to district office, or from one district to another, wherever the need for their services is most urgent.

At the beginning of the war all available grazing examiners and grazing assistants were assigned to make a close but rapid examination of the national forest ranges with a view to decide where it would be possible to take care of more stock without greatly endangering the permanent welfare of the range. The special work of these men has had much to do with the emergency increases of cattle and sheep on the national forests in 1918, amounting to about 500,000 sheep and 250,000 cattle. The maintenance of these increased numbers of stock without danger of unwarranted damage to the range and to live-stock production next year and in future years necessitates a close watch of range and stock by grazing experts. The work of grazing examiners and grazing assistants differs in the degree of technical as well as adminis-

trative responsibility.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Lengt servi	
Mark Anderson, Ogden, Utah	Grazing examiner. Attended Academy of Idaho 3 years; University of Idaho, 2 years' work at forestry school. Prior to permanent appointment served as forest guard one summer.	Yrs. 1	Mos. 5½
Raymond J. Becraft, Ogden, Utah.	Grazing examiner, district office, Ogden, Utah. Graduate Weber Academy, Ogden, Utah; student Utah Agricul- tural College 1 year, agriculture and botany, and at Utah Agricultural College 1 year.	2	4
Wm. R. Chapline, jr., Washington, D. C. (in the field about 7 months in every year).	Grazing examiner. Graduate University of Nebraska, B. S., specializing in forestry and botany. Before re- ceiving permanent appointment was employed by For- est Service for part time during 3 years. Experience in Forest Service as planting assistant, nursery work, field assistant, and forest guard.	6	1/2
Lynn, H. Douglas, Denver, Colo	Grazing examiner, district office, Denver. Graduate University of Nebraska, B. S. Had practical experience in Iumbering and worked one summer with Ohio forestry commission before appointment to present position. Has studied the ranges of district 2 and knows more about them than any other man.	7	2
F. D. Douthitt, Alameda, Cal	Grazing examiner. Studied forestry, botany, and allied subjects at University of Nebraska. Since entering Forest Service has specialized on range investigations and administration.	5	4
Walter L. Dutton, Baker, Oreg	Grazing examiner, Whitman National Forest. Graduate Oregon Agricultural College, B. S. Employed as forest guard during college vacation.	5	2
Leon C. Hurtt, Missoula, Mont	Grazing examiner, district 1. Graduate University of Nebraska, B. S. in forestry. Served as forest guard in the Forest Service two summers before permanent ap- pointment.	3	6
John Craig Kuhns, Oakridge, Oreg.	Grazing examiner, Deschutes National Forest. Attended public and high schools and 3 years at Pennsylvania State College. Entered Forest Service as guard.	7	$6\frac{1}{2}$
Theodore B. Nichols, Ogden, Utah.	Grazing assistant. Graduate University of Nebraska, B. S. and M. A. Employed by Forest Service during college vacations as field assistant and forest guard for 4 years previous to permanent appointment, exclusively on range-management work, in which he is ranked as a specialist.	4	5
Jesse L. Peterson, Portland, Oreg.	Grazing examiner, assigned to the district office at Portland, Oreg., spending entire time on work looking to increase of range carrying capacity, betterment of range management, etc.	6	6

#### ENGINEERS AND ASSISTANT ENGINEERS IN FOREST PRODUCTS.

Engineers and assistant engineers in forest products conduct tests to determine the mechanical or strength properties of wood as a material, such as bending and compression strength, stiffness, hardness, etc., and tests to determine the physical properties of wood as a material, including such factors as shrinkage as influenced by moisture, rate of transmission of moisture, etc. Supplemental tests are also conducted of various special wood products and of methods of kiln-drying to aid in the practical application of results. The war activities of these men have included a wide range of tests to form the basis for the selection, conditioning, and use of wood for airplanes, ships, vehicles, boxes, gunstocks, etc. In the case of airplanes, for example, strength and other tests furnish the basis for the determination of suitable species; for design in which weight, strength, etc., are vital factors; for specifications covering both raw materials and finished parts to permit the elimination of poor and the retention of satisfactory material and parts; for developing methods of kiln-drying and for checking the methods so developed; for developing built-up material, such as plywood, laminated parts, jointed parts, etc. The work of engineers and assistant engineers differs in the degree of technical as well as administrative responsibility.

A very serious situation exists at the forest products laboratory on account of the difficulty of securing and holding technical men with the proper training and experience to conduct the investigations called for by the Army and Navy and other agencies of the Government in the prosecution of the war. The technical men at the laboratory have all been trained along highly specialized lines, and it would be diffi-

cult, if not impossible, to replace them. They have been selected with great care, but many of them are within the draft age for the reason that it has not been possible to secure older men with the necessary qualifications and experience. In view of the importance and urgency of the work which the laboratory has been called upon to do and the scarcity of qualified men available for it, it is highly necessary that everything possible be done to retain the experienced men already there.

Deferred classification has been requested by the department and allowed by draft

boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length o service.
William S. Broome, Madison, Wis.	Assistant engineer in forest products. Graduate department of civil engineering, Texas Agricultural and Mechanical College. Served as rodman and instrument man on various railroads in the South and West; considerable experience in valuation and construction work	Yrs. Mo. 5
Lorraine J. Markwardt, Madison, Wis.	on these roads.  Engineer in forest products. Graduate University of Wisconsin, B. S. in civil engineering, and consulting	3 9
Harry J. Rosenthal, Madison Wis.	engineer. Assistant engineer in forest products. Graduate Purdue University, B. S. Employed 13 years in the engineering department in the city of Rockford, Ill., and as construc-	3
J. D. Studley, Madison, Wis	tion engineer for the Inland Steel Co. for a like period. Assistant engineer in forest products. Graduate School of Forestry, University of Washington, specializing in forest products. Worked at Seattle timber-testing labor- atory and in the mill and on the kilns of the Bryant Mill	8
	atory and in the mill and on the kilns of the Bryant Mill Co., Seattle. Prior to present appointment was employed 4 field seasons by Forest Service on cruising, timber sale, homestead-claims examination, patrol,	-1
Lars A. Welo, Madison, Wis	maintenance, construction, and improvement work. Engineer in forest products. Graduate North Dakota Agricultural College; graduate University of Illinois, M. S.; candidate for Ph. D., University of California; taught in high school 2 years; employed 2 years as draftsman, engineering department, North Dakota Agricultural College; engaged 5 years in graduate work and research in physics.	2
James O. Bixby, Madison, Wis	Has immediate charge of the section of computing, and in that capacity is engaged in supervising the calculation of final results from original test data secured in the various sections, but especially in timber tests. Since entering Forest Service has been connected mostly with timber-testing work and consequently has become thoroughly familiar with the methods of handling the data secured and their preparation for presentation in reports, publications, etc. It has taken years to acquire this degree of familiarity with the work, and at the present time, when the timber-testing work has been more than quadrupled on account of national-defense problems, his training and experience is invaluable in the analysis, interpretation, and application of the data, much of which have been collected over the past 15 years.  Attended school of mechanical engineering, Purdue University, 2 years; similar course in University of Wisconsin 11 years; student assistant in timber-testing works.	11 0
Melvin E. Diemer, Madison, Wis	at the Furdue Laboratory 2 years.  As chemist in forest products, conducts investigations of the chemical properties of woods and other forest products and of the application of the results in such industries as pulp and paper making, hardwood distillation, manufacture of ethyl or grain alcohol from wood waste, preparation of naval stores, treatment of woods to prevent decay or to reduce fire hazard, etc. The war activities of this employee have included a rather wide range of special problems, dealing with improved processes for the manufacture of pulp and paper, efforts to increase the production of such war essentials as acetate of lime resulting from hardwood distillation, the use of various forest products in gas warfare, both offensive and defensive, attempts to increase the production of ethyl or wood alcohol from wood waste in order to reduce the demands for grain, development of waterproof glues in order to permit a better utilization of wood in airplanes, etc. Graduate University of Wisconsin, B. A., M. A. (chemistry), and Ph. D. (chemistry). Served for 1 year as part-time instructor in chemistry in the University of Wisconsin, and for 2 years was engaged principally in scientific photographic work for University of Wisconsin.	6 7

Name and home address.	Character of work. (See also general statement.)	Length of service.
Matthew E. Dunlap, Madison, Wis	. As architectural assistant in forest products, was engaged prior to the war in an investigation of methods of fireproofing wood by means of surface coatings, impregnations, and improved methods of design. Since the war started has been engaged entirely on national-defense problems of immediate importance, chiefly in airplane construction, namely, a study of the relation between the humidity of the air and the moisture content of wood, study of methods of finishing woods to make them resistant to moisture, and study of certain problems involved in the manufacture of wooden screw plugs for shrapnel. The data obtained is being used by certain branches of the Army and Navy. He could not be replaced at this time without serious delay in the work and material loss to the Nation. His work is particularly related to much-needed improvements in the manufacture and finishing of airplane propellers.  Graduate College of Architecture, University of Illinois; subsequently employed as architectural engineer in	Yrs. Mos.
Ralph Reginald Randell, Port- land, Oreg.	Chicago.  As assistant district engineer, is in charge of waterpower problems in district 2. In addition, assists the district engineer in matters relating to road construction and the general operations of the branch of engineering, the duties of which have been recently largely increased. Graduate University of Washington, B. S. and C. E. Employed as rodman, junior topographer, and junior engineer in U. S. Geological Survey; entered Forest	4 4
Stanley Skidmore, Madison, Wis	Service as junior engineer. As laboratory aid and engineer, directs the work of a force of 12 men, in which capacity he is responsible for the proper execution of the timber-testing work as outlined by the technical staff. His long experience along this line has made him familiar with the technique of timber testing, the operation and care of testing machines, and the preparation of material for test.	5 6
Ray C. Tuttle, Madison, Wis	As examiner in forest products, conducts important war emergency work at the Madison Laboratory. In order to make the results of these investigations available for use by the Army, the Navy, and other governmental and private agencies, they must be incorporated in reports which must be technically correct and readily understandable. This requires review by a man who is both a trained engineer and a good writer. The work of technical review which this employee is doing is an essential part of the war investigations at the Madison Laboratory, and, in view of the scarcity of technically trained men, it would be very difficult to secure a properly qualified man to fill his place. Graduate University of Wisconsin, B. S., 2 years in college of engineering and 3 years in college of letters and science, with special courses in English and journalism.	
F	BUREAU OF CHEMISTRY.	
Name and home address.	Character of work. (See also general statement.)	Length of service.
Elliott Q. Adams, Washington, D. C.	Has been instrumental in designing a number of devices which have proven of great assistance in the study of a method for the manufacture of phthalic anhydride on a large scale. This article is one of the most important intermediates used in the preparation of synthetic dyestuffs. Has also designed certain pieces of apparatus in connection with the study of anthracene, which has been of material assistance. Has collaborated in a study of the absorption of gases by charcoal. The apparatus which Dr. Adams has designed in the latter connection has proven of great service, and it is felt that his work will be of great importance in gas-defensive warfare. Because of his knowledge of optical instruments he has been of much service to the chemists of the Signal Corps. He has also studied several compounds which are of importance in aerophotography and has been able to give the Signal Corps much information of great value along this line. The very important lines of investigation which have been brought to a conclusion by him could not have been completed had he been called in the draft.	Yrs. Mos.

Name and home address.	Character of work. (See also general statement.)	Length of service.
Elliot Q. Adams, Washington, D. C.	Graduate in chemical engineering, Massachusetts Institute of Technology. For several years was research assistant with the General Electric Co. Was also teaching fellow 1 year, assistant 1 year, and instructor 2 years in the department of chemistry at the University	Yrs. Mos.
Joseph A. Ambler, Washington, D. C.	of California.  Has been engaged upon a very valuable line of work in the study of phthalic anhydride and a study of charcoal, which have a direct relation to work connected with the successful prosecution of the war.  Completed chemistry course at the Sheffield Scientific School, receiving degree of E. H. B.; also took special course in chemistry at the Yale graduate school, receiving degree of Ph. D. Prior to entering department	1 5½
Howard R. Smith, Washington, D.C.	was laboratory assistant 3 years at the Sheffield Scientific School, professor of chemistry 3 years at Acadia University, Nova Scotia, and for 2 months was research chemist for the Standard Aniline Products Co., Wappinger Falls, N. Y.  Is now engaged in studies of chlorophyll in connection	5 7
	with our investigations looking to the establishment of a dye industry in this country. Has been engaged most of the time since entering the bureau on the analysis of food products in connection with the enforcement of the food and drugs act. Has done valuable experimental work in packing canned tomatoes; also made a special study of certain essential oils, and is expert in their examination.  Graduate Case School of Applied Science, B. S. in	
Herbert A. Lubs, Washington, D.C.	chemistry.  Assists in color investigations, giving special attention to chlorination and dyes. Some of these dyes are of special use in bacteriological work.  Graduate Newberry College (S. C.), B. A.; took 4 years' postgraduate work in chemistry at Johns Hopkins University, receiving degree of Ph. D. Prior to present appointment was organic chemist for 4 months in the Hygienic Laboratory, U. S. Public Health Service, and for 2 years was employed as organic chemist in Swiss	3 8½
Harry E. Roethe, Washington, D.C.	cheese investigations in the dairy division, Bureau of Animal Industry.  Has charge of investigations in the control of smut-dust explosions and fires which occur in thrashing machines and which have caused serious losses. No one esle is available to undertake this work. In addition to the project on smut-dust control in thrashers, Mr. Roethe is engaged in the investigation of the control of dust explosions and fires in cotton gins. Is the only engineer in the bureau who has been called upon to conduct investigations of this nature. This work, as well as that in relation to smut-dust control, is of an emer-	11½
	gency character.  Graduate University of Wisconsin college of agriculture, B. S., majoring in agricultural engineering. Since graduation has had considerable experience and train- ing in connection with machinery and mechanical devices. Has been in charge of gas-engine operation for the Fuller & Johnson Manufacturing Co., Madison, Wis., engaged in the manufacture of gasoline and kerosene engines. Was employed by the Interna- tional Harvester Co. as traveling farm-machinery expert, engaged in installing, inspecting, and repairing farm machinery and equipment, especially thrashing machines, in the vicinity of Davenport, Iowa. Has had special experience with the J. I. Case Thrashing	
Harold H. Brown, Washington, D. C.	Machine Co. in connection with the manufacture and testing of gas tractors.  Is engaged in the prevention of grain-dust explosions, which has a direct application to the conservation of food and which is conducted under special emergency appropriations. It is extremely difficult to obtain chemists with the techincal knowledge necessary to properly conduct these investigations.  Graduate Syracuse University, specializing in chemistry and physics; also obtained Ph. D. degree from University of Minnesota, his special work being in organic industrial chemistry and the chemistry of wood products. Subsequently, was employed by the Pittsburgh Glass Co. for 1 year, taught various branches of special chemistry for 3 years, and for about 9 months	3 9

Name and home address.	Character of work. (See also general statement.)	Length of service.
Hylton R. Brown, Washington, D. C.	Engaged in developing inert gas application as a preventive of dust explosions and fires in grain mills and elevators. This work is of an especially high character and has a direct application to the conservation of foods. Much difficulty is experienced in securing chemists having the requisite technical knowledge to undertake investigations of this character.  Graduate Pennsylvania State College, B. S., taking the milling engineering course. Subsequently was employed 4 years doing general milling work at Williams-	Yrs. Mos. 1 12
W. Bruce Mather, Washington, D. C.	milling engineering course. Subsequently was employed 4 years doing general milling work at Williamsburg, Pa.; also spent 1 year in practical milling work at the Washburn-Crosby Co.'s mill at Buffalo, N. Y. Engaged in the emergency campaign in the prevention of grain-dust explosions and fires in mills and elevators. This work has a direct relation to the conservation of foods. The bureau has experienced great difficulty in obtaining chemists with the technical knowledge and training necessary to carry this work forward. Graduate Pennsylvania State College, B. S., taking work in milling and mechanical engineering. For 2 years was high-school teacher in chemistry and mathematics. Was employed for short periods with the	73
Walter F. Clarke, Washington, D. C.	engineering department of the Anglo-American Mills Co., Owensboro, Ky., and with the Benton Roller Mills. Engaged in working on the detection of metals in foods, also assisting in cooperative investigation of steel for tin plate, which, it is anticipated, will result in a considerable saving in tin plate as well as perishable foods. This work has very close connection with the conservation of foods. Graduate Hampden-Sidney College, A. B.: 1 pursued	1 9
Ralph W. Frey, Washington,	postgraduate studies in chemistry and physics at Johns Hopkins University during 6 sessions; subsequently did a great deal of special work in chemistry. Engaged in both research and routine work on leather, paying special attention to the securing of data for the War Department on the serviceability of shoe leather for the American armies. He is the only man in the bureau familiar with all phases of these investigations. Graduate George Washington University, B. S. in chemistry. For a few months he served in the chemical	4 5
Kenneth P. Monroe, Washington, D. C.	Engaged in the preparation of invertase for use in the department's experiments on cane sirup. There is no other available chemist in the bureau conversant with this process. Dr. Monroe has also been working in the laboratory on the utilization of vegetable ivory waste, with particular reference to the production of mannose from it and the preparation of useful derivatives from this mannose. One of these derivatives is mannite, which is much needed in the preparation of an explosive, namely, nitromamnite. The experiments already conducted indicate that vegetable ivory waste offers an extremely fertile	1 1
	therefore very important that the research work on this subject be carried out as rapidly as possible. The bureau has no other chemist who is entirely conversant with the various lines of work now being carried on by Dr. Monroe. Graduate University of Chicago, B. S. in chemistry; also received Ph. D. degree from Columbia University. Served 2 years as instructor in chemistry at the Okla-	
Victor E. Grotlisch, Washington, D. C.	homa State University.  Is 1 of 2 employees of this bureau trained to conduct research and demonstration work on naval stores. Is the only man familiar with assembling the permanent resin types devised by the bureau. This work is important and necessary.  Graduate University of Cincinnati, C. E. For 2 years prior to entering department was instructor in general chemistry, physics, and engineering chemistry at the Me-	3 8
Harold J. Humphrey, New York, N. Y.	istry, physics, and engineering chemistry at the Mechanics Institute, Rochester, N. Y., and for a short period was chemist for the Eastman Kodak Co. at Rochester.  Engaged in various lines of food inspection, particularly in connection with milk. In cooperation with other Government agencies, the bureau is investigating continually the supply of milk and milk products furnished to our own Government and to the allies. Mr. Humphrey has conducted a number of investigations along this line. No one to whom the bureau could turn at the present time could take charge of these assignments. In addition, Mr. Humphrey has collected evidence in connection with cases now pending in court. Should he be drafted into military service, it is probable that these cases would have to be dropped, as they could not be prosecuted without the evidence which only Mr. Humphrey could furnish.	1 0

Name and home address.	Character of work. (See also general statement.)	Length of service.
		Yrs. Mos.
Harold J. Humphrey, New York, N. Y.	Graduate Cornell University; had practical experience as a bacteriologist before entering department service.	
Julian K. Dale, Washington, D. C.	Has charge of the field work in the emergency sirup investigations under the food production act. This work	5 0
	is very important at the present time and demands a specially qualified investigator to properly carry it on.	
	In several Southern States the production of sirup has been backward because of the technical difficulties in-	
-	volved. One of these is that cane juice, if concentrated too far, will crystallize. It has been Dr. Dale's work to	
	find a practical method to prevent this crystallization, and, on the other hand, to prevent fermentation due to	
	the fact that the cane juice was not concentrated far enough. He has been able to work out a method for	
	overcoming both these difficulties and has been enabled	
	to produce a sirup that is superior in quality to the ordinary commercial product. He has devoted a good	
	deal of time to the demonstration of this method for the purpose of stimulating the production of sugar cane.	
	purpose of stimulating the production of sugar cane.  These methods, if followed, will prevent much of the present loss in sirup manufacture due to the spoilage of	
	a considerable portion of each year's crop. There is no one in the bureau who could immediately take up this	
	work were Dr. Dale to leave.	
	Graduate Princeton University; took 3 years of graduate work, receiving degree of M. A.; a year later received degree of Ph. D. in chemistry. He also taught chemistry	
	in this university for 2 years while doing graduate work.	
Fredolf T. Anderson, New York, N. Y.	Is engaged in the examination and inspection of foods, which has to do with the detection of adulteration and	3 11
•	sophistication. Due to the unsettled conditions and high prices, this work is of special importance at the	
	present time. At least 1 year's training would be necessary to school a new man to carry on the work which Mr.	
	Anderson is doing. Graduate University of Minnesota, B. A. and C. E. Did	
	considerable practical work in the laboratories of the university while a student.	
Walter F. Baughman, Washing-	Is engaged chiefly in the examination of various waters	5 8
ton, D. C.	under the food and drugs act. It would take a number of months to train a man with equal technical ability in	
	this particular line. Graduate University of Pennsylvania, B. S. Subse-	
•	quently held a position as chemist for the Ohio Watch Co.	
Victor B. Bonney, Berkeley, Cal	Is engaged in analytical work in connection with food and drug control, which is of special importance at this time,	3 7½
	owing to the fact that under the present high prices the	
	temptation to adulterate and sophisticate food and drugs is greater than during normal times.  Graduate Washington State College, B. S. in chemistry.	
	was instructor in chemistry in this institution I year	
John II Donners Chicago III	and spent 8 months in the fuel laboratory of the Bureau of Mines at Pittsburgh.	
John H. Bornmann, Chicago, Ill	Is engaged in food-inspection work, and in addition has carried on an extensive investigation of the composition	5 7½
	of different corn meals. He is skilled along special lines of investigation. His work is especially important at	
	the present time, having to do primarily with foods. Graduate University of Illinois, B. S. and M. S.; also taught chemistry 2 years at the same institution. Engaged principally in the food work being conducted by the Bureau of Chemistry. This work is of greater im-	
Lloyd A. Bosworth, Santurce,	taught chemistry 2 years at the same institution.  Engaged principally in the food work being conducted by	10
P. R.	the Bureau of Chemistry. This work is of greater importance than ever at the present time, as an extremely	
	close watch must be kept on the various food products to prevent various forms of adulteration and manipulation.	
	Graduate University of Wisconsin, B. S. in chemistry; took 1 year of special graduate work in organic chem-	
	istry, with research in alkaloids, at the same time teach-	
•	ing organic chemistry; was also a student assistant in general chemistry 1 year. Prior to entering department	
Floritory N. Chita h. C.	service head the position of assistant chemist at the Geneva Experiment Station for 2 months.	
Fortune N. Chisolm, Savannah, Ga.	Engaged in inspection work in connection with the inter- state shipment of foods and drugs. Under present con-	1 10
	dition this work is of nore importance than ever before. Graduate Mississippi Agricultural and Mechanical College,	
	B. S. in chemistry and engineering; also studied pharmacy 6 months at the Southern College of Pharmacy at	
	Atlanta, Ga. Previous to entering the bureau, held the	

Name and home address.	Character of work. (See also general statement.)	Length of service.
James O. Clarke, Savannah, Ga	Engaged in carrying on investigations of the methods of determining water in foods and feeding stuffs. This is a very important line of work at the present time, due to the fact that such items should receive closer supervision than ever before, as the temptation to adulterate them is greater because of the scarcity and high prices of these commodities.  Graduate Georgia School of Technology, B. S. in engineer-	Yrs. Mos. 0 10½
Charles W. Crawford, Washington, D. C.	ing chemistry. For 4 years was assistant State chemist of Georgia.  Was engaged in the examination of food and drug products at the New Orleans laboratory of the Bureau of Chemistry, but, on account of his special knowledge of the problems arising under the food and drugs act, has been transferred to the office of the chief of this bureau to assist in the handling of correspondence arising under the act, as well as to take care of interstate cases instituted thereunder.  Graduate, Oklahoma Agricultural and Mechanical College.	1 4
Herbert W. Daudt, Washington, D. C.	lege, B. S.; also took one year's post-graduate work, receiving degree of M. S. Subsequently was assistant chemist and instructor in chemistry at this institution for 1 year; assistant State chemist and instructor in chemistry at the Washington State College for 1 year; agriculturist at Apache, 4 years; and chemist with the International Refining Co., in Oklahoma, 1 year. Engaged in reasearch work of a high quality as applied to methods of determination of nitrogen; also executive work in assisting in the operation of 1 of the laboratories	5 0½
	of the bureau.  Attended Washington University 2 years; also pursued studies in chemistry at Harvard University, receiving degrees of B. S. and M. S. Subsequently was employed as analytical chemist by the Mallinckrodt Chemical Works 1 year and was associated with the Commonwealth Edison Co. of Chicago as analytical and research chemist part of a year; was also instructor at the Univer-	,
Fred L. Elliott, New Orleans, La	sity of North Dakota 4 years. Engaged in the examination of food and drug products. This work is of unusual importance at the present time on account of the close scrutiny necessary to detect adulteration and sophistication of these products. Graduate Louisiana State Univeristy Agricultural and Mechanical College; took 1½ years' post-graduate work in chemistry at Cornell University; also 1 summer's post-graduate course in organic and electrical chemistry at University of Chicago. Subsequently was instructor in chemistry in the Mississippi Agricultural and Mechan-	5 0
Jacob Feldbaum, Chicago, Ill	at University of Chicago. Subsequently was instructor in chemistry in the Mississippi Agricultural and Mechanical College for 2½ years, and I summer was assistant chemist in the Mississippi State laboratory. Conducts food analysis, factory inspection, and other special investigations. Is skilled in special methods of investigation. His work has to do with the detection of frauds in food products, which assumes special importance at the present time.	4 0
Leslie W. Ferris, Takoma Park, Md.	Graduate Collège of the City of New York, B. S. in chemistry; also pursued post-graduate research work at same college 2 years.  Engaged in reasearch work on dairy products, devising a method for the chemical detection of the use of "neutralizers" in butter. From present indications it would appear that he has a retted their will not fail for dividing the content of the content of the result of the content o	5 <b>5</b>
Abraham J. Finks, Washingtonton, D. C.	these "neutralizers." Such work is of great importance to the Bureau of Chemistry, especially at this time, when, because of scarcity and high prices of food products, manufacturers are tempted to manipulate and sophisticate these articles.  Graduate Haverford College, B. A., majoring in chemistry; took 1 year's post-graduate work in chemistry at same institution. For about 5 months was chemist in the laboratory of the Du Pont Powder Works.  Engaged in special work in the analysis and preparation of protein. Were he removed from this work, it would take at least 1 year to train a new man to take his place, even if it were possible to obtain a chemist of the necessary qualifications. There are few men in this country engaged in this line of work.  Graduate Massachusetts Institute of Technology. Since entering the department has received degree of B. S. in chemistry from the George Washington University.	2 1

Name and home address.	Character of work. (See also general statement.)	Lengt	
Carl D. Geidel, Minneapolis, Minn.	ent, due to the unsettled condition of the food market, the products being offered for sale require closer attention and supervision than ever before.  Graduate University of Wisconsin, M. S., taking course in food and scientific chemistry; did post-graduate work at that institution. Afterwards was assistant in chemistry and bacteriology. State laboratory of hygiene, Wisconsin, and was appointed bacteriologist and chemist for the Wisconsin State dairy and food commission. In his chemical course at the University of Wisconsin	Yrs. A	
Thomas G. Gleason, New York, N. Y.	specialized in food analysis under one of the best food chemists in the country.  Conducts special investigations relating to the occurrence and determination of heavy metals in foods. It would require not less than 2 years of training to develop a new man to take up this work. There is no other chemist now available for work of the character performed by Mr. Gleason.	4	10½
Charles B. Gnadinger, Chicago, Ill.	Graduate Harvard University, B. S., specializing in chemistry and mathematics.  Engaged in general analytical work on food products, paying special attention to imported products. This work to-day requires greater accuracy and closer investigation than ever before.  Graduate University of Kentucky, B. S., in industrial	6	2
Raymond Hertwig, Berkeley, Cal.	chemistry.  Engaged upon analytical work in connection with the enforcement of the Federal food and drugs act. This work is of especial importance at the present time, because the high price of foods makes it a great temptation to adulterate them. It is therefore exceedingly important that men trained in food analysis be retained upon that work. At the same time it is very difficult under present conditions to replace these men.  Graduate Purdue University, B. S.; took some post-graduate work at Chicago University, specializing in chemistry. For 2 years was instructor in chemistry at	4	71/2
Joseph M. Humble, Bellevue, Ky.	Colorado Agricultural College. Assists in the analysis of foods in connection with the enforcement of the food and drugs act. Graduate State College of Kentucky, B. S., in industrial chemistry. For several years after graduation was engaged as a commercial chemist in various industries.	4	81/2
John B. Hummer, Baltimore, Md.	inspectors of the bureau engaged in the enforcement of the food and drugs act. At the present time it is practically impossible to secure experienced inspectors. It is necessary to take green men and train them to the work. Because of the importance of efficient inspectoin work, it is highly important that the bureau retain as many of its experienced men as possible. Mr. Hummer has collected evidence in connection with cases now pending in court. Should he be drafted into military service it it probable that these cases would have to be dropped, as they could not be prosecuted without the evidence	7	812
Walter E. Kirby, New York, N. Y.	which only he could furnish.  Engaged chiefly upon the inspection and examination of imported foods. Also conducts a line of original work upon the detection of refined olive oil in virgin olive oil, in which he has been very successful. This work has a direct connection with the enforcement of the food and drugs act.  Graduate Princeton University, B. S. and M. A., doing research work in inorganic chemistry; was also a lecture	5	9
Henry A. Lepper, Washington, D. C.	table assistant in college.  Engaged in the practical application of a method for the detection of spoilage in tomato products. Also makes analyses of food samples for Government purchase. This work is very essential in connection with the enforcement of the food and drugs act and in checking the purity of food products purchased by the Government. Graduate George Washington University, B. S. Served as assistant chemist in the United States Geological	4	61/2
Herman Lind, Brooklyn, N. Y	as assistant chemist. In the 'Omted States Geological Survey prior to present appointment.  Is an experienced food and drug inspector, thoroughly familiar with trade conditions in the vicinity of New York. Possesses a knowledge of this field which can not be found in any other available person. Has developed, and figures as a prospective witness in, a number of pending court cases, and is developing others. Should he be drafted into military service it is probable that these cases would have to be dropped, as they could not be prosecuted without the evidence which only Mr. Lind	7	61/2

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Name and home address.	Character of work. (See also general statement.)	Length of service.
Robert S. Hollingshead, San Francisco, Cal.	Assists in the analysis of samples at the San Francisco laboratory in connection with the enforcement of the food and drugs act, and Mr. Hollingshead is one of the most experienced chemists in the western district.  Graduate Cornell University, A. B.; did post-graduate work at that institution 1 year. For 2 years was assistant at Cornell University filtration plant, for a short time assistant chemist in the food laboratory of the New York State department of agriculture, member of the faculty of the University of Georgia 2 years, and assist-	Yrs. Mos. 4 1
Hugo G. Loesch, Buffalo, N. Y	ant chemist at the Florida Experiment Station.	9
Howard E. Palmer, Washington, D. C.	Engaged upon research work requiring the highest degree of exactness and ability. It is aimed that the work shall produce methods of practical use in food work. The results of this research will be very valuable in the enforcement of the food and drugs act and in food conservation.	3 10
Homer D. Poore, New York, N. Y.	Graduate Yale University, B. A. in chemistry and allied sciences; attended the Yale graduate school 3 years, specializing in chemistry and receiving degree of Ph. D. Was employed for 2 years as assistant chemist by a commercial concern, and was engaged as assistant chemist in the Bureau of Standards 2 years previous to entering the service of the Bureau of Chemistry.  Engaged in analysis of citrus fruits; is also doing considerable work in connection with the investigation of	6 0
Sidney F. Sherwood, Washington, D. C.	cttrus by-products. This work is of particular impor- tance at this time when every effort is being made to increase and conserve the food supply. Graduate in the chemistry course of the Worcester Poly- technic Institute, obtaining degree of B. S. Engaged upon work in connection with the application of	16 5
Edward E. Smith, Washington, D. C.	the food and drugs act to sugar products. He has had long experience in this work. Graduate George Washington University, B. S. Is performing experiments upon the practical and scientific effects of nitrogen oxide in the bleaching of flour. This work is of special importance in connection with the enforcement of the food and drugs act. Much of the work	3 10½
Wendell Vincent, Seattle, Wash	that Mr. Smith has done would have to be repeated should he leave the service of the bureau.  Graduate University of Idaho, B. S. in chemical engineering. Was engaged as a commercial chemist for approximately 1 year before entering the service of the department.  Has charge of the Seattle food and drug inspection station of the Bureau of Chemistry. The services of such men are most urgently needed in connection with the enforcement of the food and drugs act and never more so than at the present time. Mr. Vincent has collected evidence in connection with cases now pending in court, which cases would probably have to be dropped should he	3 3½
John B. Wilson, Washington, D. C.	cases would probably have to be dropped should he leave the service, as they could not be prosecuted without the evidence which only Mr. Vincent could furnish. Graduate University of Colorado, B. A. Engaged in chemical work relative to the proper preparation and preservation of foods. His education, training, and other qualifications specially fit him for this work. A new chemist entering the bureau to undertake the duties now performed by Mr. Wilson would require months of training.	6 11
Milton G. Wolf, New York, N. Y	Graduate Ohio State University, B. A., specializing in chemistry.  Is stationed at the New York laboratory of the Bureau of Chemistry and has had several years' training in the inspection of imported foods, particularly those requiring examination as to conditions, such as presence or absence of filth, mold, and various other forms of decomposition. Has become an expert in this line of work, and it would not be possible to secure a new man having the same degree of proficiency. It would require not less than 1 year of intensive training to enable an experienced man to fill his place with any degree of satisfaction. The work Mr. Wolf is doing is of greater importance than ever before, and there is a greater volume of this work at the New York laboratory than at any other place in the country.	4 7

Name and home address.	Character of work. (See also general statement.)	Length of service.
Milton G. Wolf, New York, N. Y	Graduate New York University, B. S. in chemical engineering. During 2 summers was associated with the	Yrs. Mos.
Erich W. Schwartze, Washington,	National Lead Co. of Brooklyn, N. Y., as assistant chemist. Engaged in carrying on investigations that are of direct	1 11
D. C.	importance in connection with the enforcement of the food and drugs act. Has been studying the action of sodium citrate, a substance largely used for the anti-coagulant in the transfusion of blood. Has also been studying the action of a number of other drugs of importance.	-
	Graduate University of Illinois, A. B.; also University of Chicago, M. D. Was instructor in physiology and pharmacology at Bellevue Hospital medical college 2 years.	
J. Lewis Clay, East Orange, N. J.	Is an experienced drug analyst and has expert knowledge in the analysis of patent medicines. The degree of pro-	1 1
•	ficiency attained by Mr. Clay can only be found in men possessing a peculiar aptitude for that kind of work, in addition to several years' experience. The bureau has been greatly handicapped because a number of the older men, experienced in drug analysis, have recently left the service. The field stations have particularly suffered in this respect. These field stations are called upon	
0.00	regularly to make examinations of imported and inter- state shipments of drug products, and this work can only be carried on by trained analysts. Mr. Clay is assigned to the New York station, which has a larger number of samples to examine than any other station of the bureau.	
•	Graduate school of pharmacy, Northwestern University; also pursued work in chemistry at a private school and took 1 summer's course in analytical chemistry at the Armour Institute of Technology; in addition, took several academic courses. Prior to entering department did considerable commercial work in the manufacturing of pharmaceutical substances, was an assistant in chemi-	
Willis H. Cole, Brooklyn, N. Y	cal laboratories, also instructor in chemistry. Engaged in the examination of imported and interstate drug products in the New York laboratory. It is very difficult, if not impossible, to secure competent drug analysts. There is no civil-service register at the present time for chemists having the necessary qualifications	0 7
Clare O. Paring Weshington D. C.	for this work. Graduate Polytechnic Institute (Brooklyn), B. S. in chemistry. Prior to present appointment was chemist for Moller & Schumann Co., of Brooklyn, N. Y., varnish makers.	
Clare O. Ewing, Washington, D. C.	Has charge of the pharmacognosy laboratory of the Bureau of Cnemistry. Has assisted in collecting data for the establishing of standards for crude drugs and spices and data used as subjects for the revision of U. S. Pharmacopeia IX and Circular 19, Standards of Purity for Food Products. Has served as referee on the testing of chemical reagents for the past 3 years for the Association of	4 9
	cal reagents for the past 3 years for the Association of Official Agricultural Chemists. The work he performs is important, and there is nobody in the bureau as well qualified as Mr. Ewing to take his place.  Graduate Ohio State University, B. S. in pharmacy; also took 1 year's postgraduate work at same university, obtaining down of M. S. in chemistry.	
Ernest H. Grant, Elmhurst, N. Y.	obtaining degree of M. S. in chemistry. Engaged in the analysis of food and drug products, with which work he has had very wide experience, being especially skilled in the analysis of drug preparations, such as proprietary medicines. During the past year has prepared a set of methods for the detection of medical purgative drugs. The work being done by Mr. Grant is of greater importance than ever before because of the fact that, due to the high prices and scarcity of these products, the temptation for firms to adulterate or	8 0
· ·	manipulate their products is greater than it has been in the past. It is necessary, therefore, for the proper safe- guarding of the public that extremely close attention be given to food and drug products entering the markets to-day. Graduate Ohio State University, B. S. in chemical engi-	
Carl H. Lowary, New York, N. Y.	neering. Was assistant chemist for the Merrell Chemical Co. I summer.  Assists in drug analyses. Expert drug analysts are extremely necessary to the adequate and effective prosecution of the bureau's work, and under present conditions they are exceedingly hard to find.  Graduate Ohio State University college of pharmacy, B. S. C. in pharmacy.	0 10
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Name and home address.	Character of work. (See also general statement.)	Length of service.
Samuel Palkin, Washington, D. C.	Assists in the drug laboratory of the bureau, doing considerable research work along special lines, as well as regular routine work. The work performed in the drug laboratory is of greater importance now than ever before because, on account of the high prices and scarcity of	Yrs. Mos. 7 5
	drugs on the market, the temptation to adulterate and	
, ^	nation and supervision is required to protect the public. Was student 1 year at New York University school of applied science, chemical engineering course; graduate Hill University, Ph. B., taking course in chemistry; also received degree of M. S. at George Washington University, majoring in chemistry; Ph. D. at same university.	
Clarence D. Wright, Washington, D. C.	Devotes his time chiefly to the analyses of drug products arising under the food and drugs act and to some Post Office Department cases. Graduate Clark College (Worcester), A. B., majoring in physics and chemistry; also received degrees of A. M.	6 6
1	and of Ph. D. from same institution, specializing in chemistry. For 1 year was assistant in chemistry at Clark College, and for a year was research assistant to one of the professors there. Was also connected with the research	
Carl B. Stone, Washington, D. C	faboratory of the General Electric Co., Schenectady, N. Y., 1 year.  Engaged in the analysis of insecticides and fungicides in connection with the enforcement of the insecticide act. It is extremely important that the work in connection	7
	with the enforcement of this act be carried on with more than ordinary vigilance during the period of the war on account of the temptation on the part of manufacturers to adulterate their insecticides and fungicides, due to the difficulty of obtaining the necessary ingredients and to their high prices. This matter becomes doubly important because of the great necessity under the existing con-	
	ditions for increasing crop production. Graduate Bethany College (Lindsborg, Kans.), A. B.; also	
	took postgraduate course in chemistry at Nebraska University, during which time was also assistant in the chemical laboratories and instructor in general chemistry. Prior to entering department service was assistant chemist with the Great Western Sugar Co., of Lovell, Wyo.	
Milo L. Somerville, Hyattsville, Md.	connection with the enforcement of the insecticide act.  It is especially important that the work in connection	7
	with the enforcement of this act be carried on with more than ordinary vigilance during the period of the war on account of the temptation on the part of manufacturers to adulterate their insecticides and fungicides, due to the	
	difficulty in obtaining the necessary ingredients and to their high prices. Graduate Indiana University, A. B., specializing in chem- istry. For approximately 1 year was chemist for the Oliver Iron Mining Co.	
Charles M. Smith, Washington, D. C.	Is an expert insecticide and fungicide chemist, and has been engaged in most of the department's research work in connection with lead arsenate, which at the present time is the most important insecticide for leaf-eating insects. Is now working on the chemistry of the calcium	7 2
	arsenate and has obtained much new and valuable in- formation relative thereto. The calcium arsenates have only recently been developed as insecticides and promise to open up an entirely new field in the use of arsenical	
	sprays. This is of particular importance at this time, since it permits the use of lime in place of lead, which not only is high-priced but is much needed in the manufacture of munitions.  Graduate University of Pennsylvania, B. S. Before en-	
Elmer J. Nealon, Washington, D. C.	tering the service of the department was employed as chemist in the Philadelphia Storage Battery Co. Performs chemical work in connection with the enforce- ment of the insecticide act. He has had long and varied experience in this work. It would require several years	5 6
L <sub>i</sub>	to train a man so that he would be equally valuable to the bureau. Graduate Ohio State University, B. A. For a short time	
Edward L. Griffin, Washington, D. C.	previous to entering the department was assistant chemist in the Water Purifying Works at Columbus, Ohio.  Is the most experienced organic chemist in the bureau having to do with insecticides and disinfectants and performs the analytical work in connection with the most complicated products. Is the analyst witness in a number of the control of the c	4 11½
	cated products. Is the analyst witness in a number of important cases now pending before the courts, which would have to be dropped in case Mr. Griffin severed his connection with this bureau.	

Name and home address.	Character of work. (See also general statement.)	Length of service.
Edward L. Griffin, Washington, D. C.	Graduate University of Kansas, A. B., B. S. in chemical engineering, and M. S., major work being in organic chem-	Yrs. Mos.
Henry C. Bowman, Indianapolis, Ind.	institution.  Engaged in investigations relating to the handling of turkeys and chickens in the Imperial Valley of California. This is a most important and relatively new source of	1 11½
Arden D. Greenlee, Indianapolis, Ind.	meat supply, the work being a part of the special emergency food-production campaign. Graduate University of California, B. S. in agriculture, specializing in animal husbandry; also took a graduate course at this institution 1 term.  Has charge of special emergency field work in connection with demonstration poultry and egg packing houses. This work has a very direct bearing upon the meat supply of this country, and Mr. Greenlee is the only man available who is qualified by experience and training to supervise it.	9 6
Edwin C. Heinsohn, Indianapolis,	Completed a course in chemistry with the International Correspondence Schools; did 2 years' work at the Ohio State University college of arts, philosophy, and science, with electives in chemistry. Was superintendent's assistant at the Ohio State University I year. Took considerable work in chemistry and graduated with the degree of B. S. at the University of Pennsylvania. Is investigator in poultry and egg handling. His knowl-	3 0
Ind.	edge is of great value at the present time in helping to save losses due to defective transportation facilities. It would be impossible to replace Mr. Heinsohn without material loss to the work now in progress, because it is impossible for a man to acquire the information that he now has except by experience in the service. The work in which he is engaged is in direct line of increasing the production and conserving the food supplies of the country.	
Ralph L. Skinner, West Lafayette, Ind.	Graduate Cornell University, B. S. Assists in poultry and egg handling investigations and demonstration, being engaged at present on work in southern California because of the pressing need for the prevention of loss of a large crop of turkeys now being marketed there. This work is of great importance at the	1 21/2
Howard R. Hill, Philadelphia, Pa.	present time. Graduate Purdue University, B. S., specializing in poultry. Engaged on war emergency work in connection with the better handling, transportation, and storage of fish. It is necessary to have a man trained along fundamental scientific lines to conduct the broad and effective cam- paign for better methods in fish handling. It was difficult to find a man suited for this work, as men with training in this particular line of work are extremely scarce. Mr. Hill is the only man in the bureau engaged in this line of	7½
	investigation.  Attended University of Chicago 2 years; graduated from Carroll College, A. B.; attended University of Illinois agricultural college 1 term; received M. S. degree in zoology at University of Illinois graduate school after 1 year's study, his major work having to do with fish para-	
George D. Horton, Philadelphia, Pa.	sites and diseases. Engaged in bacteriological work in connection with fish investigations. Present knowledge of the scientific fundamentals for the good handling offish is crude. Previous to entering this bureau Mr. Horton had engaged in lines of work which gave him an unusually good training. He is now engaged in investigations which promise to be of great economical importance in the utilization of fish resources. This line of work is entirely new. Graduate Connecticut Agricultural College, B. S., in agri-	9
Herbert B. Switzer, Chicago, Ill	culture; also received degree of M. S. in bacteriology at Yale University.  Is making a special study of the manufacture of powdered milk products, which are used in large amounts by the Army. As a result of this study, it has been possible to bring official action looking to the correction of certain serious abuses which are shown to exist. Mr. Switzer is the only bacteriologist of the bureau assigned to the territory in the Central States in connection with the enforcement of the food and drugs act. A very great part of the food production and manufacture of the country originates in his territory.	10½

Name and home address.	Character of work. (See also general statement.)	Length of service.
****		Yrs. Mos.
Benjamin S. Levine, Washington, D. C.	Engaged in research and testing work on the mildew-proofing offabrics and leather. In addition to the value of this	2 10
	work to the farmers, it is of special importance to the Nation at this time in connection with the preservation	
	of materials used as tents, wagon covers, clothing, shoes, and many other articles used by the military branches	
	of the Government. Mr. Levine is the only man in the	-
	bureau familiar with this work. Graduate Trinity College (Hartford, Conn.), B. S.; also received degrees of M. S. and Ph. D. from Brown Uni-	
	received degrees of M. S. and Ph. D. from Brown University. Prior to entering department was health bac-	
	teriologist in Brown University, industrial bacteriologist	
	for a Providence chemist and teacher of textile chemistry in the textile department of the Rhode Island School of	
Victor Birckner, Washington, D.	Designs. Has devoted his time to the study of obscure organic pro-	0 01
C.	ducts in foodstuffs and to the cultural side of the investiga-	$3  2^1_2$
	tions of the production of glycerine by fermentation through yeast. There is no one else in the bureau who	
	could carry on this work.	
	Graduate University of Leipsic and University of California. Subsequently was connected with the Institute	
Harry L. Lourie, New York, N. Y.	of Fermentology in Chicago for 1 year.  Is the only experienced microanalyst now connected with	0 0
Hally D. Doulle, New Tork, N. 1.	the analytical staff at the bureau's New York laboratory.	8 8
	Has completed a large series of analyses which involve possible court actions, in connection with which his tes-	
	timony will undoubtedly be frequently required within	
	the next year or two. Graduate Harvard University, B. S. Previous to enter-	
	ing the department was assistant in chemistry at the Central Evening High School of Boston and was em-	
	ployed for a considerable time as chemist of the Carnegie	
Walter K. Makemson, Washington,	Steel Co., Youngstown, Ohio. Engaged in the microanalysis of foods, this work having to	91
D. C.	do primarily with canned goods. He has been specially trained for the work. Its importance is apparent because	
	of its direct connection with the production and conser-	
	vation of foods. Graduate Michigan Agricultural College, B. S. and M. S.	
Ernest E. Stanford, Washington,	Attended University of Michigan 1 year. Has assisted in the study of the morphology and chem-	1 3
D. C.	istry of the cotton plant, in the inspection of crude drugs,	1 3
	and in microchemical analyses: has also assisted in the general microphotographic work, in which he has been	
	very successful.	
	Graduate Massachusetts Agricultural College, B. S.; did graduate work at the North Carolina College of Agricul-	
	ture and Mechanical Arts for 2 years, receiving degree of M.S. Was assistant in botany and plant pathology and	
	bacteriology at the North Carolina Agricultural Station	
	for 2 terms.	

## BUREAU OF MARKETS.

#### GRAIN SAMPLERS.

The proper enforcement of the grain-standards act requires that the Department of Agriculture supervise the grading of grain by licensed grain inspectors. Grain inspection is a highly technical work, and only a limited number of men are qualified from the standpoint of experience to properly perform grain-sampling duties. At the present time the Bureau of Markets is in need of some 72 grain samplers, in addition to those now on the rolls, to efficiently carry out the requirements of the grain-standards act. The civil-service register for grain samplers has only a limited number of men available, and of this limited number a large proportion are either in class I of the draft or are not suitable for the work. It has been the experience in the enforcement of the grain-standards act that grain samplers can not be properly fitted to do the work without considerable training. In addition to the 72 samplers needed at the present time, the bureau is constantly receiving resignations from the grain-sampler force. To lose any of the experienced samplers who are now on the roll would very seriously interfere with the efficient enforcement of the grain-standards act. The grain-standards act at present is performing an especially important function in connection with the regulations of the Food Administration Grain Corporation, which requires that all transactions in wheat must be on the basis of the Federal grades.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name and home address.	Character of work (see also general statement).	Length of service.
		Yrs. Mos.
William D. Bennett, Toledo, Ohio.	Graduate Cornell College of Agriculture, B. S. Was raised	1 0
John E. Bohn, St. Louis, Mo	on a farm where grain was one of the main products. Graduate University of Missouri, B. S.; took post-graduate	10
	work at that institution, specializing in marketing and rural organization work. During summer vacations	
	rural organization work. During summer vacations was employed by the St. Louis Merchants' Exchange as	
	grain sampler, his duties including the sampling of cars of grain at elevators, mills, and railroad yards, and noting	
Willis B. Combs, Boston, Mass	and recording of the condition thereof. Graduate Cornell University College of Agriculture, B. S.;	1 4
Willis D. Collibs, Dostoli, Mass	making a special study of moisture determinations and	1 4
Francis A. Cumings, Minneapolis, Minn.	the grading and handling of grain. Was employed 3 years by the E. H. Pugh Sampling Bureau at Cass Lake, Minn., and for 5 years as grain sampler by	1 3
Hazen P. English, Kansas City, Mo.	the Minnesota State grain inspection department.  Graduate Michigan Agricultural College, specializing in	10
	farm crops and grain judging. Was reared on a farm and	10
John H. Frazier, Detroit, Mich	has had practical experience in the handling of grain.  Prior to entering department service had 7 years' experi-	1 3
	Prior to entering department service had 7 years' experi- ence in sampling and grading of grain, being familiar with the details necessary for making moisture tests and	
W 11 0 W 1	for keeping records of samples and inspections.	
Harold S. Heilman, New York, N. Y.	Before entering department service had 4 years' experience as a deputy grain inspector with the Buffalo Corn Ex-	1 3
	as a deputy grain inspector with the Buffalo Corn Ex- change, being familiar with the details of handling, sam-	
9,0	pling, inspecting, and grading of grain, and had experience in the methods obtaining in transferring grain from	
	cars and boats to elevators and from elevators to trans- portation lines.	
Wayne D. Mathews, Fort Worth,	Previous to present appointment was employed by the	9
Tex.	Kansas State grain inspection department, first as in- spector's helper, later as grain sampler, being engaged in	
	securing samples of grain at railroad yards, steamship docks, warehouses, and elevators, in noting the condi-	
	tion and quality of grain, in keeping records and making	
	reports thereon, and in making analyses of samples in the laboratory.	
Walter J. Morgan, Salt Lake City, Utah.	Graduate Oregon Agricultural College, B. S. During sum-	10
John F. Mueller, Indianapolis, Ind.	mer vacations was employed upon grain farms. Graduate College of Agriculture, University of Minnesota,	10
	B. S., specializing in agronomy, farm crops, weeds, and seed testing, and grain judging.	
Herbert E. Nelson, Duluth, Minn	seed testing, and grain judging.  For 4 years previous to present appointment was employed by the grain investigation description of the Minus	10
	ployed by the grain inspection department of the Minne- apolis Railway and Warehouse Commission as grain	
	sampler, his duties including the sampling of loads of grain at railroad yards, mills, elevators, and steamship	
Thomas J. O'Brien, Milwaukee.,	docks, preparation of reports, and keeping of records.	10
Wis.	Prior to appointment in the department was employed by the Illinois State grain inspection department as grain	10
	sampler, his duties including the sampling of cars of grain at mills, elevators, railroad yards, and steamship	
	docks, noting the condition and quality of the grain, making records and reports, and conducting laboratory	
D	moisture determinations.	
David E. Overlock, Chicago, Ill	For 2 years before entering department service was employed by the Illinois State grain inspection department	10
	as grain sampler and grain helper, his duties consisting	
	of the sampling of cars of grain at mills, elevators, rail- road yards, and steamship docks, noting condition and	
	quality thereof, keeping records, making reports, conducting of moisture determinations in the laboratory,	
	making separations of damaged grain, and investigating	
William A. Pahl, Minneapolis,	other factors involved in the grading of grain.  For 5 years prior to present appointment was employed	10
Minn.	by the Omaha Grain Exchange, first as helper and sampler, later as grain inspector. His duties consisted of	
1	by the Omaha Grain Exchange, first as helper and sam- pler, later as grain inspector. His duties consisted of sampling cars of grain at mills, elevators, and railroad	
	yards, and assisting with inspection work and laboratory analyses.	
Bertram J. Rogers, Toledo, Ohio	Graduate New York State College of Agriculture, where his work has included special studies in growing, grading,	1 4
	and handling grain. He was reared on a farm, and has	
	and handling grain. He was reared on a farm, and has had much practical experience along agricultural lines; also 2 years' experience as a public-school teacher.	
William D. Smith, New Orleans, La.	Before taking up present duties had 5 years' experience in the handling and shipping of grain with H. I. Baldwin	1 3
	& Co., Decatur, Ill.	

Name and home address.	Character of work. (See also general statement.)	Length of service.
James P. Stanfield, Louisville, Ky.	Before appointment in this bureau was employed for 5 years by the West Tennessee Grain Co. at Obion, Tenn., as bookkeeper and local grain buyer, his duties including the buying of conference for the territory it.	Yrs. Mos. 10
Gregory L. Straight, Kansas City, Mo.	the buying of grain from farmers in that territory, its sampling, inspecting, and grading.  Prior to entering the department had 5 years' experience in the sampling, handling, and inspection of grain, part of which time was with the Kansas City Board of Trade; was also connected with the Kansas State grain inspec-	1 3
Ralph W. Taylor, Louisville, Ky.	tion department.  Previous to present appointment had 4½ years' experience as manager in the buying, receiving, and shipping of grain at cooperative warehouses and 1½ years' experience as sampler in the Illinois State inspection department.	1 3
Carl A. Waalen, Minneapolis, Minn.	taking an engineer's course specializing in botany soils	1.0
James W. Wesson, Nashville, Tenn.	and wood. Two years prior to appointment in this department was employed by the Burdick Sampling Co. at Glenwood, Minn., and by the Duluth Board of Trade as grain sampler, his duties consisting of the sampling of ears of grain at mills, elevators, and railroad yards, noting its condition, and making records and reports thereon. Graduate University of Kentucky, A. B. and B. S., special-	10
	izing in agricultural economics and marketing investiga- tions. For 1 year prior to appointment in this depart- ment was employed as assistant instructor in agricul- tural resources and marketing investigations at the University of Kentucky.	
John W. Wetz, New York, N.Y	University of Kentucky.  Graduate Cornell University, B. S. in agriculture. Was reared on a farm and has had active practical experience in the harvesting; handling, storing, and shipping of grain and other farm products.	9
John J. Ahearn, Cincinnati, Ohio .	Has charge of the Cincinnati branch office of the Bureau of Markets, in connection with the market news service on fruits and vegetables. His knowledge of railroad affairs has made him particularly valuable in the Cincinnati market, as this is an important diversion point. Previous to present amployment was for several years with	1 9
Harold C. Albin, Washington, D. C. (spends considerable time in the field.)	vious to present employment was for several years with the Pennsylvania R. R. in New York City, handling fruit and vegetable deliveries and assisting with the auction sales on their piers. Assistant in handling and transportation investigations with fruits and vegetables. His withdrawal from this work would seriously interfere with the emergency food conservation campaign now under way.	3 0
	conservation campaign now under way. Graduate University of Illinois, B. S. Previous to present appointment had been connected with the Bureau of Chemistry for approximately 2 years, engaged in handling and transportation work, particularly as relates to poultry, eggs, etc.	
Frank W. Allen, Washington, D. C. (spends considerable time in the field.)	Is engaged in a campaign to increase the storage facilities fruits and vegetables in Colorado, in cooperation with the State marketing office and the State council of defense. There is urgent need for this work in Colorado and other States, and it is practically impossible to secure men with adequate training and experience along these lines. Graduate University of Missouri, B. S. in agriculture;	8
,	3 years' research work Towa State College. Before his present appointment was assistant professor in the Washington State Agricultural College in charge of fruit	
William F. Allewelt, Washington, D. C. (spends considerable time in the field.)	handling and marketing work.  Has been rendering practical service in demonstrating to growers and shippers in Michigan the value and requirements of the potato grades. Other States have asked for assistance from the department in conducting work of a similar character to that performed in Michigan. Only men with special training can successfully conduct such work. He is also rendering service in connection with the enforcement of the standard container act.  Graduate Pennsylvania State College, B. S. in horticulture.	1 2
George H. Baston, Washington, D. C.	Prior to present appointment had several years' experi- ence in growing and handling vegetables.  Has charge of the investigational laboratory in which the acidity determinations of the grain-standardization project are carried on, and is responsible for outlining, directing and supervising the work of the force employed	11 0
	thereunder. His work has included an investigation to determine the practicability of substituting in part flours made from grains other than wheat for the wheat flour. He has participated in all the main activities of the grain standardization project, both field and labora-	
	tory, and has assisted in formulating standard grades for both corn and wheat. He also has supervision of the investigational work relating to the bleaching of oats commercially, and at present is assisting in perfecting the tentative standards for oats.	-

Name and home address.	Character of work. (See also general statement.)	Length of service.
George H. Baston, Washington, D. C.	Graduate George Washington University, having specialized in chemistry. Prior to present appointment was employed 4 years in the Bureau of Chemistry on investigational work relating to the chemistry of cereals and milling and baking tests of wheat and flour; detailed to the Forest Service 1 season to make special field investigations relative to the composition of soils in the national forests of the Northwest; and was assistant in grain standardization Bureau of Plant Industry, for 5	Yrs. Mos.
Harold S. Bird, Washington, D. C. (spends considerable time in the field.)	years. Engaged in investigations relating primarily to methods of car loading and transportation of perishable food products, the results of which to date indicate serious mistakes in methods of loading these products in different sections of the country, resulting in heavy loss in transit and at market terminals. It is urgently necessary for the effectiveness of this work, which is essentially connected with the war work, that these investigations should be continued and extended. It is also equally important that the demonstrations of the results secured be given the widest publicity.  Graduate Michigan Agricultural College, B. S., specialized	3 . 0
Ralph H. Brown, Washington, D. C.	in horticulture and pomology.  Has had considerable grain experience in an executive capacity, and is now giving assistance in the rendering of decisions relating to questions involved in the enforcement of the grain-standards act. It is important that the grain supervision work be maintained on an efficient basis, especially in view of the bureau's cooperation with the Food Administration Grain Corporation, and this can be done only through the retention of trained and	9
John A. Burgess, Pittsburgh, Pa	experienced men.  Has charge of the Pittsburgh branch office of the Bureau of Markets. He not only collects information regarding conditions in the live stock and dressed meat trade in Pittsburgh, but releases the market reports of the bureau in the territory served by the branch office in Pittsburgh. Graduate Ottumwa (Iowa) Public State College, B. S. Prior to entering the Government service was employed in a large meat-packing plant in Ottumwa, Iowa, where he acquired experience in marketing dressed meats and meat products, qualifying him to cope with the reporting conditions in the wholesale dressed meat trade in the	95
Charles A. Burmeister, Washington, D. C.	large meat consuming cities.  Engaged in work in connection with the market news service on live stock and meats. This market report service consists in furnishing telegraphic reports of live-stock receipts and prices at Chicago, which information is distributed by leased wire to the bureau's various local offices and is used exclusively by the telegraph companies and press associations in their commercial news services. He is also regularly engaged in investigational work connected with the live stock, slaughtering, and meat packing industry of the country.  Graduate Texas Agricultural and Mechanical College. Subsequent to graduation and prior to entering the Government service was engaged in the live-stock industry as manager of his father's ranch in Texas, where	7 0
Earl A Chenault, Richmond, Va	he gained a thorough knowledge of the industry in the range State.  Has charge of the Richmond, Va., office of the grain and hay reporting market service of the Bureau of Markets. This is war emergency work, its main object being to put the producers of grain and hay who have surpluses of such stocks, in touch with dealers and others desiring them. Reports are issued biweekly giving in detail the the amounts of grain and hay on hand, the amounts shipped in and out of each county, and the carload prices. These reports are distributed by mail to all	1 10
Doak B. Carrick, Washington, D. C. (spends considerable time in the field).	people who express a desire to receive them. Graduate Ohio State Univeristy, B. S. in agriculture. Engaged primarily in emergency work in connection with the handling of apples and other fruits and vegetables injured by freezing in transit, with a view to reducing to a minimum the losses of these products in transporta- tion. Also engaged in developing methods of handling which apply to the successful storage of perishable food products by preservation in freezing storage. These investigations relate directly to the conservation of fruits and vegetables and have a particular war bearing at the present time. To a considerable extent, they provide the basis for other lines of work connected with the storage project which relate primarily to the refrigera- tion of these products, both in transportation and storage.	0 7

Name and home address.	Character of work. (See also general statement.)	Length service
Doak B. Carrick, Washington, D. C. (spends considerable time in the field).	Graduate, Wake Forest College, North Carolina, A. B.; also received degree of Ph. D. from the New York State College of Agriculture. In connection with investiga- tions for his doctor's thesis, made an extended study of	Yrs. Mo
James H. Collins, Washington, D. C. (spends considerable time in the field).	the effect of freezing on plant tissues. Has filled varied and important assignments in connection with the surveys of fruit and vegetable markets conducted by the Bureau of Markets and the inauguration and development of the market news service covering	3
	these products, including the conduct of special investi- gations. During the past year has represented the de- partment in a comprehensive study of the marketing problems of Maricopa County, Ariz., conducted by this bureau in cooperation with the University of Arizona.	
	As a result of this survey definite action will be taken looking to the stabilizing of agriculture in the valley. After the completion of this survey in Arizona Mr. Collins was placed in immediate charge of the bureau's investigation of transporting farm products by motor truck. The motor-truck transportation problem is of	
Joshua M. Chilton, Washington,	especial importance at the time. Graduate University of Arkansas, B. S., specializing in agriculture. Assists in the enforcement of the provisions of the United	0
D. C.	States grain-standards act in Washington and at such points in the field as his services may be required. On account of his experience in handling the varieties of grain which pass through the markets in the South and Southwest, was at first detailed to act in charge of the	
	twenty-fifth Federal grain supervision district, with headquarters at Memphis, Tenn. Memphis is one of the gateways to the large consuming area of the South- east. There is inspected in this market approximately 25,000,000 bushels of grain annually. The importance	
	of carrying on the work in connection with the grain- standards act is fully recognized.  Prior to present appointment was in the employ of the Missouri State inspection department for 9 years; for 2	
	years supervising the weighing and handling of grain at terminal elevators, thereby gaining an intimate knowl- edge of the methods employed in handling, cleaning, clipping, mixing, and grading all kinds of grain at the large elevators, and 7 years in sampling and making analyses necessary to determine the true grade of grain.	
	Subsequently was employed 1 year by a grain concern in St. Louis as grain salesman on the floor of the Merchants?  Exchange and during a part of the year as its traveling representative. His experience has included the classi-	1
Saxon D. Clark, St. Louis, Mo	fication and grading of almost every variety of grain and has afforded him an opportunity to become thoroughly familiar with the grain industry.	1
	Markets in connection with its news reports on fruits and vegetables.	
Charles F. Creswell, Washington, D. C. (spends considerable time in the field).	entering department had I year of practical experience in the Maine Apple Growers' Association.  Has charge of the cottonseed activities of this bureau, being the only representative of the bureau who has been in close touch with the various phases of the cotton-	9
	seed industry. For the past year has been engaged in economic investigations conducted for the purpose of eliminating the large amount of foreign matter which annually is transported and purchased with cotton seed and which results in democrate actions and which results in democrate actions and which results in democrate actions.	
è	seed, and which results in damaged cotton seed and a lower quantity and quality of edible products, as well as requiring the utilization of about 4,000 extra freight cars each year. Has also been engaged in the development of practical commercial standards for cotton seed	
	and the elimination of serious economic losses and wasteful practices existing in the trade. In cooperation with the Food Administration has assisted materially in the formulation of rules and regulations established to govern the cottonseed industry.	
	High school, business college, and law university graduate; has pursued other collegiate work, including a corres- pondence course in agriculture at Pennsylvania State College, and has had practical farm and railroad exper-	
	ience.	

Name and home address.	Character of work. (See also general statement.)	Length of service.
George H. Dacy, Washington, D. C. (spends considerable time in the field).	Engaged in general live stock and meat marketing investigations. His broad knowledge of agricultural conditions and ability as a writer make his services particularly valuable, especially in the work undertaken and carried on in conjunction with the Federal Trade Commission in collecting at loading points information relative to the marketing of live stock at local packing plants and the large centralized markets. Is at present assisting in the preparation for publication of the material obtained in this investigation. From the very inception of this important live stock and meat work, both marketing and market reporting, the Bureau of Markets has met with extreme difficulty in securing men with proper training and experience to fill the positions. Graduate University of Wisconsin, B. S. and M. S. in agriculture. Prior to entering Government service oper-	Yrs. Mos. 1 0
William H. Darrow, Providence, R. I.	ated a farm of his own and wrote on agricultural topics for a number of publications. While employed as a writer for one of the leading agricultural journals traveled extensively over the country and acquired a broad knowledge of farming conditions and methods of handling and marketing agricultural products. He devoted special attention to live-stock marketing problems. Has charge of the local market reporting service at Providence, R. I., which he inaugurated and developed, and which has proved a decided success. This service seeks to encourage the consumption and conservation of locally raised products and assists in the elimination of waste through efficient distribution of the local food supply. Producers, dealers, and consumers are daily advised as to market conditions, and farmers and housewives, as well as dealers, avail themselves of the service.	0 10
ē.	It is proving of great importance in utilizing vegetables when particularly plentiful and liable to waste. Graduate Middlebury College, B. A., and Cornell University, M. A., in pomology and agricultural chemistry. Was instructor in horticulture in the University of Maine for a year and spent 3 years in practical horticultural work.	
George C. Edler, Washington, D. C.	Is chief assistant to the specialist in seed marketing and has direct supervision of the compilation and revision of material submitted by field reporters for publication in the Seed Reporter. Also handles special assignments in connection with the work of this project. Is thoroughly familiar with every phase of the seed industry. There are very few firms in the country employing men in the capacity in which he has had experience, and the field from which it is possible to recruit men of his specialized commercial training is exceedingly limited Graduate University of Illinois, B. S. in agriculture. Prior to entering Government service was employed in seed work, both on the farm with seed growers and with seed dealers; spent 4 years with a seed company in Minneapolis as traveling salesman and buyer of farm seeds, also having abovers of the seed company and appreciate the content of the seed company in Minneapolis as traveling salesman and buyer of farm seeds, also having above the content of the seed company in Minneapolis as traveling salesman and buyer of farm seeds, also having above the content of the seed company in Minneapolis as traveling salesman and development of the seed company in Minneapolis as traveling salesman and development.	1 10
Vernon P. Fawcett, Spokane, Wash.	also having charge of the seed corn department.  Has charge of the Spokane, Wash., office of the grain and hay market reporting service of the Bureau of Markets. This is strictly war-emergency work, its main object being to put the producers of grain and hay who have surpluses of such stocks in touch with dealers and others desiring them. Reports are issued biweekly giving in detail the amounts of grain and hay on hand, the amounts shipped in and out of each county, and the carload prices. These reports are distributed by mail to all people who express a desire to receive them.  Graduate University of Idaho, B. S. in agriculture, specializing in agronomy, horticulture, and botany. Was reared on a farm, and during the latter portion of his college course assisted in the analyses of seeds in the agronomy department of the university. For 3 years prior to his entrance into the Government service acted	0 9
Adelbert D. Gail, jr., New York, N. Y.	as State seed commissioner of Idaho.  Has charge of the New York branch office of the Bureau of Markets operated in connection with the collection and distribution of market information on fruits and vegetables. The enormous receipts of this market, drawn from every section of the country, make it an exceedingly difficult one to cover.  Attended the University of Pennsylvania 3 years. For 3 years he was a member of the firm of J. H. Gail, of Buffalo, in which capacity he gained valuable experience in the marketing of perishable products and had an opportunity to become familiar with the problems relating to the marketing of these products. For a period prior to present appointment was employed as advertising representative of a large publishing company.	3 9

Name and home address.	Character of work. (See also general statement.)	Length of service.
John C. Gillilan, Washington, D. C.	Has charge of the work of checking the railroad superintendents who report each night the loadings of live stock on their respective divisions. Supervises the activities of a large force, both in Washington and in the field, engaged upon this work. From 350 to 400 railroad division superintendents telegraph live-stock loadings nightly to the bureau, and the speed with which the necessary corrections, because of delinquencies on the part of the superintendents, must be made is a considerable factor to their value. Mr. Gillilan also supervises the force which compiles the information received from the railroads' superintendents in a summary to be transmitted each morning to all branch offices for release. Graduate University of Minnesota, B. S. One year of graduate work in University of Minnesota in agricul-	Yrs. Mos
Willis G. Goodenow, Fargo, N. Dak.	tural economics.  Engaged in investigations carried on at agricultural college of North Dakota, relative to milling and baking values of wheat and flour. His training and experience as a milling engineer make him especially valuable at this time in connection with the effort being made to correlate the investigational work of this department with that of other departments relating to the conservation of the wheat supply of the country.  Graduate Pennsylvania State College, having specialized in flour-milling engineering. Prior to appointment in the Bureau of Markets was employed as scientific assistant in the Bureau of Chemistry; also had 7 years' experience as assistant milling engineer in commercial work.	1 5
Homer A. Harris, Washington, D. C. (spends considerable time in the field).	Has been employed on responsible independent field assignments which have included potato distribution reports at Idaho Falls, Idaho, handling the market news service at Plant City, Fla., and Monett, Mo., during the commercial movement of the strawberry crop, supervision of the service during the peach movement in Fort Valley, Ga., and the maintenance of an office at Macon, Ga., to distribute market reports on watermelons.	1 10
Bryon G. Hays, Kansas City, Mo.	stock and meats project at Kansas City, Mo., and in collecting and releasing daily market information relating to the live-stock and meat trade. Much difficulty has been experienced in getting together an adequate and efficient force to handle the increasingly important work connected with this service, particularly to man the local offices, especially at the large centralized markets of Chicago, Kansas City, and other central western points.  Graduate college of agriculture of the University of Nebraska, B. S. Prior to present employment had considerable experience in judging and buying live stock	9
Stanley G. Hilton, Washington D. C. (in field considerable part of time).	for a commission firm at Omaha.  Engaged in conducting investigations of the warehousing of grain and in the administration of the United States warehouse act, including the preparation of rules and regulations for enforcement thereof. Has had a thorough training in the fundamentals of handling and storing grain and has assisted in the consideration of the complex problems arising in connection with this work, including the study of types of elevators and warehouses, the insurance of grain in storage, and the methods of handling and caring for this product. The proper warehousing of grain is of paramount importance in the conservation of this important product in the present emergency. Much difficulty has been experienced at all times in securing men with the requisite	1 0
Frederick J. Hughes, Washington, D. C.	training for this work.  For the past 2 years has handled all the appointment and civil-service work and all the records of the personnel of the Bureau of Markets. This work has become unusually heavy during the past several months and probably will remain so for an indefinite period. For the past 18 months consistent efforts have been made to train an understudy for Mr. Hughes, but for various reasons it has been impossible to develop and retain any satisfactory candidate for such a position. Mr. Hughes has a thorough knowledge of the civil-service laws, rules, and regulations, and of the precedents and policies of the department and of the bureau in dealing with appointments and promotions.	

Name and home address.	Character of work. (See also general statement.)	Length of service.
Clarence E. Killingsworth, Washington, D. C. (spends considerable time in the field).	Employed primarily on cotton-spinning tests conducted by the department, and incidentally on work connected with the cotton-standardization and cotton-marketing projects. At present is engaged on experimental spinning tests which are being conducted by the U.S. Department of Agriculture in cooperation with the	Yrs. Mos. 3 0
	War Department and the Department of Commerce, for the purpose of developing a suitable airplane fabric from cotton to replace the linen fabric now being used. It is highly important to develop from cotton as promptly as possible, a suitable airplane cloth to be used in the manufacture of airplanes, Completed textile course in the Mississippi Agricultural College; also had experience in erecting machinery in	
Clarence W. Kitchen, Washington, D. C.	carding and spinning rooms in northern and southern cotton mills. He has had considerable experience in the actual commercial manufacture of cotton fabrics. Has been associated with the market-surveys project since the inauguration of the market-news service in 1915 and has had comprehensive training in almost every branch of the work of this project. Has assisted in the opening of numerous new stations and suggesting improvements	5 9
	in the service of those already opened. When the rapid growth of the news service necessitated an extension of the administrative work of the project in Washington in January, 1917, Mr. Kitchen was assigned to the task. At present he is in immediate charge of the assignment of field forces and the daily administrative duties of permanent branch offices. Owing to his broad experience gained by actual contact with the work since its inception, it would be exceedingly	
Harvey E. Larsen, Boston, Mass	difficult to replace him.  Investigates in cooperation with the Boston Market Gardeners' Association problems of marketing and distributing locally grown truck-farm products, the cost of marketing by this method as compared with others, and the value of reporting local market conditions and prices through the local press. The market conditions in practically all large New England cities, especially Boston, have become very acute, and the local truck growers and members of State council of defense made a very urgent	11
George Livingstone, Washington, D. C.	request to this bureau for assistance in solving the problems. This service is proving very valuable as a means of meeting emergency marketing problems. It is one of the most effective means of stimulating the consumption of locally grown produce, lowering prices, and conserving foodstuffs.  Graduate University of Wisconsin, M. S., having completed all the marketing work which the university offers. Prior to entering the department service, received valuable experience in commission dealing in the commission district of Chicago, and for severa lyears was connected with the farm crop department of the Michigan Agricultural College.  Has charge of the Federal grain supervision under the United States grain-standards act, directing the work of the grain supervision adistricts of the country, and has general supervision over all the grain and hay marketing activities of this bureau, through which the emergency work of the department in issuing market reports on these commodities is directed. Assisted in the prepara-	3 0
Brice M. Mace, jr., Washington,	tion of the rules and regulations promulgated for the enforcement of the United States grain-standards act and of other regulatory publications issued in connec- tion with the enforcement of that act. Has directed the promulgation of standards for shelled corn and wheat, personally supervising the holdings of hearings on grain standards and directing the investigation of the practices of marketing grain at country and at terminal points. Graduate Ohio State University, B. S. in agriculture; took graduate work at Cornell University and at Halle- Wittenberg. For several years was assistant professor or agronomy at the Ohio State University, and was ten- dered the position of chief of the newly created depart- ment of farm crops at that institution, which position he declined for the purpose of entering the service of this bureau.  Has supervision of the administration of the branch offices	9
D. C.	opened in connection with the live-stock and meat reporting service of the Bureau of Markets. It is very difficult at this time to obtain the services of men possessing the administrative ability combined with a knowledge of live-stock marketing methods.	9

Name and home address.	Character of work. (see also general statement.)	Length of service.
Price M. Mace, jr., Washington, D. C.	Graduate Cumberland University, Lebanon, Tenn., B. S.; studied law at the University of Chicago, and is at present taking an M. A. course in economics at George Washington University. Was reared on a Tennessee stock farm and was in charge of city and county school systems for	Yrs. Mos.
Nathan Menderson, Washington, D. C. (spends considerable time in the field).	7 years. Engaged on grades and standards work. This work is of very great importance to southern peanut growers because practically no effort has been made by the department looking to the establishment of standard grades for peanuts. The purpose of this work is to enable the recommendation to growers of the best methods of handling and grading their peanuts and also to determine what will consitute practical market grades for both shelled and unshelled peanuts. Peanuts are now becoming an important food product, and their standardization and important market grading and market ing in a decimination of the standardization and important food product, and their standardization and important food products.	3 6
Benjamin C. Moomaw, Washington, D. C. (spends considerable time in the field).	improved methods of grading and marketing is of decided importance, not only to the large producing sections of the South but also the consumer.  Graduate Yale University, A. B., and Cornell University, M. A. Prior to entering the Bureau of Markets, was employed by the Bureau of Plant Industry in connection with the introduction and development of new vegetables in the South.  Assists the project leader in charge of State cooperation in marketing work, in coordinating the various projects of the bureau with the State cooperative activities. Also assists in a study of the cooperative marketing work being carried on by the bureau in the Southern States,	1 9
	rendering help to the field agents in these States in the development of their activities and in the improvement of their methods.  Graduate Washington and Lee University. Prior to entering the Bureau of Markets was for 6 years actively engaged in orcharding in the State of Virginia and in marketing apples both in this country and abroad. For 1 year was institute lecturer in fruit growing for the Virginia department of agriculture and immigration, and later extended this work to other branches of agricul-	
Joe D. Morgan, New Orleans, La	tural interests. Served as a director and president of the Virginia Fruit Growers' Association for several years. Has been engaged in making field and laboratory investigations relative to the method of handling, grading and transporting commercial grain; acted temporarily as grain supervisor under the grain-standards act. At present has charge of the grain-standardization investigations being made at New Orleans. In connection with this work, assists in the investigations relative to the causes and prevention of explosions and fires in grain elevators, mills, and various kinds of machinery used in the handling of grain. These investigations have a direct relation to the efforts being made to conserve the wheat supply of the United States both by prevention of grain loss by fire and the deterioration of commercial grade on	2 10
	grain caused by smut in wheat. During the past thrashing season Mr. Morgan has assisted in the cooperative project relating to smut-dust control in wheat at thrashing time, investigating special devices recommended by experts of the department and determining the effect of the application of these devices to thrashing machinery.  Graduate Montana State College of Agriculture and Me-	
Julius H. Peters, Boston, Mass	chanic Acts, B. S. in biology.  Assists in the conduct of the telegraphic market news service on live stock and meats at Boston. He is fully familiar with the intricate details relating to reporting meat-trade conditions, which has a direct bearing on the food supply in the present emergency.  Graduate Iowa State College, B. S. Was employed as instructor of agricultural economics at this institution parts of 2 terms, and as teacher of agriculture at the	1 2
William C. Quick, Washington, D. C. (spends considerable time in the field).	parts of 2 terms, and as teacher of agriculture at the Atlantic (Iowa) High School for I year. Has been continuously associated with investigations regarding the handling, transportation, and storage of fruits and vegetables. Supervises important lines of work in the Facific Northwest directly related to the conservation and marketing of fruit crops grown there. He is thoroughly familiar with the fruit industry and with the proper construction and management of storage houses for apples. The conservation of foodstuffs is a question of primary importance and the work upon which Mr. Quick is now engaged bears directly on that problem.  Graduate University of Arkansas, B. S. in agriculture.	3 8

Name and home address.	Character of work. (See also general statement.)	Length of service.
Sam H. Ray, Kansas City, Mo	In charge of the live stock and meat reporting station at Kansas City. Devotes much of his time to devising means whereby this service may be improved. Has rendered much assistance in connection with the installa-	Yrs. Mos. 3 11
	tion of the telegraphic market reports on estimated receipts and prices of live stock at Chicago, Ill. He is by training, experience, and ability well fitted for his present work.  Graduate Texas Agricultural and Mechanical College; took post-graduate course at the University of Illinois. Prior to entering the Bureau of Markets had 6 years' experience in ranching in Texas; was employed 2 years as instructor in animal husbandry in the first district agricultural College at Jonesboro, Ark.; and was in the service of the Bureau of Animal Industry, where he was selected to investigate the beef industry of Guatemala.	
Frederick W. Read, Kansas City, Mo.	selected to investigate the beefindustry of Guatemala. Has assisted in the development of the cold storage reporting system of the bureau. After the organization of the work, covering some 70 commodities, Mr. Read was assigned to take charge of all the market news work in Florida, including both the permanent market station at Jacksonville as well as the numerous field stations throughout the State. Was subsequently placed in immediate supervisory charge of the work of this project in the district bounded by the Rocky Mountains and the Mississippi River. It is believed that this system will greatly relieve the Washington office of a vast amount	2 8
	greatly relieve the Washington office of a vast amount	
Stanban A Pagan Washington	of administrative detail.  Graduate Massachusetts Agricultural College, B. S.; graduate student Harvard University school of arts and sciences, 2 years. Prior to entering the Bureau of Markets was assistant in farm management, Bureau of Plant Industry, and instructor in agricultural economics, Massachusetts Agricultural College, for short periods.	7 8
Stephen A. Regan, Washington, D. C.	Assisted in the preparation of the Government's standards for wheat and in investigations relative to the handling of grain in bulk rather than in sacks. Besides having a wide general experimental knowledge of all classes and grades of wheat, is especially familiar with all matters relating to the wheat growing area throughout the Pacific Northwest. Assisted in the work of organizing the grain standards supervision work, having for a period acted as Federal grain supervisor in charge of the Denver office, and for a period as grain supervisor in charge of the San Francisco office. When in January, 1918, Dr. J. W. T. Duvel, in charge of the grain standardization work in the Washington office, was designated to proceed to Australia and other Australasian points for the purposes of special investigations, Mr. Regan was brought to Washington to take Dr. Duvel's place during his absence.  Graduate college of agriculture, University of Idaho, B. S.	
Wormand D. Diebenders, West	in agriculture. Prior to entering the service of the department served for 1 season as State food commissioner of Idaho.	
Howard B. Richardson, Washington, D. C. (spends considerable time in the field).	Has been engaged primarily in cotton standardization and spinning test work, and assisting with the manufacturing tests made by the department for the purpose of determining the spinning value of the different grades, staples, and other qualities of upland, sea-island, and Arizona-Egyptian cottons. At present engaged on the experimental spinning tests being conducted by the department in cooperation with the War Department and the Department of Commerce for the purpose of developing suitable airplane fabric from cotton to replace the linen fabrics now being used. Has represented the bureau at various points in the cotton handling and marketing activities.	7 8
Patrick J. Roach, Minneapolis, Minn.	Completed a 3-year course in mechanical engineering at the Massachusetts Institute of Technology and a 3-year course in cotton manufacturing with the American Correspondence School. Prior to his appointment in the Bureau of Markets served nearly 4 years as laboratory aid in the Bureau of Plant Industry.  Last year had charge of the Minneapolis office of the Bureau of Markets in connection with the market surveys project. As the Minneapolis office is in the center of an important potato-producing section, he gave special attention to reports on this commodity, with the result that this season he has been assigned to more important potato-producing sections to give specialized service on this product to the growers in these districts. He started the	1 9
	season at Eagle Lake, Tex., and is now handling the distribution of reports in the Fort Smith (Ark.) district.  Prior to entering Government service had many years' experience in the produce business.	

Name and home address.	Character of work. (See also general statement.)	Length of service.
Otto W. Schleussner, Los Angeles, Cal.	Has been in immediate charge of the work of developing a national market news service on fruits and vegetables since its inauguration in 1915. When it was decided to inaugurate the news service and inspection service on the Pacific coast this spring. Mr. Schleussner was selected to supervise the combined work of these 2 projects in the territory west of the Rocky Mountains. It seemed advisable to handle this work as a district problem, inasmuch as the marketing problems of Pacific coast growers are different from those encountered in any other part of the country and must be handled separately. He exercises supervisory control over the permanent branch offices on the Pacific coast, including a number of the most important producing points. He also serves in an advisory capacity in considering general policies relating to the fruit and vegetable marketing activities of this	Yrs. Mos. 3 4
Alfred B. Smeby, Washington, D. C. (spends considerable time in the field).	bureau. Graduate Michigan Agricultural College, B. S. in agriculture. Prior to his appointment in the Bureau of Markets had wide experience in business in various lines, truck farming, inspection work, and commercial dealings with fruits and vegetables in the markets and in the producing districts.  Was first assigned to the development of a new system of reports on live-stock movements, introduced experimentally at Lancaster, Pa., about a year ago. This project involved the perfecting of arrangements with farmers, rail-	1 2
	voived the perfecting of arrangements with farmers, ran- road agents, live-stock buyers, the trade at the Lancaster stockyards, and others to obtain accurate information concerning the "in-and-out" movement of beef cattle in 18 counties known as the Lancaster district. When the service was successfully installed at Lancaster he was detailed to Rocky Ford, Colo., to inaugurate a similar service covering the Arkansas Valley cattle and lamb feeding districts. He was later called to Washington to assume charge of important work pertaining to current	
,	bulletins on live stock and meats and was placed in full charge of the bureau's weekly live-stock and meat-trade news bulletin, supervising the reporting service on the movements of live-stock in the feeding and grazing districts of the United States. He is at present on an indefinite assignment reporting the Chicago hog market. Prior to entering Government service, was engaged in the newspaper business for 6 years, 5 years as market writer and associate editor of the Sioux City (Iowa) Daily Live Stock Record, and live-stock editor of the Sioux City Tribune.	
Edwin W. Stillwell, Washington, D. C.	Engaged in important administrative work in connection with the details of the technical daily telegraphic reports and other work incident to the assembling and issuance of market news on the movements and prices of fruit and vegetables. The administrative work requires a combination of qualifications in order to handle it successfully. Graduate Iowa State College, B. S. in horticulture, special-	. 11
Charles B. Tubergen, Pittsburgh, Pa. (spendsconsiderable time in the field).	izing in pomology and marketing.  Has handled distribution reports for a number of important perishable products at various points. Is at present in charge of the important field station at Onley, Va., where hisduties other than administrative consist in the collection and distribution of marketing information. The market news work in which he is engaged has expanded very rapidly and Congress has appropriated large sums of money to continue it.  Graduate Michigan Agricultural College. For 5 years subsequent to graduation was in the employ of the New York State Experiment Station at Geneva, and for 1 year was employed in the office of the California Fruit Growers' Exchange at Chicago.	9
Gustav P. Warber, Washington, D. C. (spends considerable time in the field).	Has recently made an exhaustive study of the production of casein in this country, the information being desired for the use of the Shipping Board and the War Industries Board as a guide in determining the policy of these boards with reference to the importation of that product and with reference to the needs of the Army and Navy for airplane construction. His principal work at the present time is connected with a comprehensive study of the marketing and handling of milk throughout the United States by means of the distribution of schedules and by personal investigations.  Graduate University of Minnesota, B. S. and M. A. in agriculture. Served as assistant in the division of agricultural economics, University of Minnesota, for 3 years, during which time he pursued the study of special problems in the field of agricultural economics.	3 11

Name and home address.	Character of work. (See also general statement.)	Length of service.
Bert W. Whitlock, Salt Lake City, Utah.	Is grain supervisor in charge of the Salt Lake City office, which is a particularly important assignment because of the variety of grain produced and shipped from the territory covered. The supervisional activities for the districtare centralized in the Salt Lake office, and from that point extensive investigations are conducted to supplement the information now available for use in the determination of standards. The department is unable to secure competent men for all of the positions of grain supervisor. The department is cooperating with the Urited States Food Administration authorities in their work with grains under the food control act. This necessitates exceedingly important and heavy work among the grain trade by the grain supervisors of the Bureau of	Yrs. Mos.
John F. Wilmeth Washington, D.C.	Markets, both at the Washington office and in the field. Graduate Kansas State University, B. S. in agriculture, specializing in grain marketing, grain grading, and milling technology; also served at this institution as student assistant in milling technology and as student assistant in chemistry. Prior to entering the Government service held several important appointments in the State grain laboratories of Montana, having direct charge of the milling and baking investigations. Was also appointed deputy State grain inspector.  Engaged in work in connection with the enforcement of the United States grain standards act and other projects dealing with the marketing of grain. He is thoroughly familiar with the provisions of the act, and also with the requirements of the rules and regulations of the Secretary of Agriculture under the act. Has attended all the hearings held in connection with the different phases of the enforcement of the act and the establishment of grades for grain promulgated thereunder. Mr. Wilmeth	9 8
Furman B. Wise, Washington, D. C. (spends considerable time in travel status).	is also in charge of the work of compiling estimates for grain projects, special reports required by Congress, and similar work requiring a thorough knowledge of department and bureau policies, legal training, and familiarity with the technical requirements under the grain standards act.  Prior to assuming his present duties held responsible positions in the administrative offices of the Bureau of Plant Industry, the office of the Secretary, and the Bureau of Markets. Is graduate of the Georgetown University law school. Has been admitted to the bar of the District of Columbia and the State of Louisiana.  Has specialized in investigations relating to the handling, grading, and transportation of rice, conducting both field and laboratory investigations in Washington, New Orleans, La., and in the rice-growing sections throughout the entire United States. Renders assistance in handling matters relating to this crop, with special reference to its commercial grade. His services are also utilized in giving assistance as to the best means of distributing the rice crop with a view to its increased use for food.  Graduate Agricultural and Mechanical College of South Carolina, B. S.; also, University of Wisconsin, M. S.	6 10

# BUREAU OF PLANT INDUSTRY.

Name and home address.	Character of work.	Length of service.
Glen B. Ramsey, Orono, Me	Engaged in the investigation of potato diseases in Maine. He has recently taken the leadership in pathological extension work in Maine and is engaged in putting into practice in that State, with the cooperation of the State extension forces, the methods of control for important diseases of truck crops, particularly potatoes, that have been worked out. Entire time devoted to the various phases of this work, including the oversight of field demonstrations, the instructing of State and county agents and farmers in methods of plant disease control, and the preparation of necessary literature on the subject, this being a part of the program of food conservation through the control of plant diseases.	Yrs. Mos.

Name and home address.	Character of work.	Length of service.
Glen B. Ramsey, Orono, Me	Graduate Indiana University, A. B. and A. M., specializing in botany, mycology, and plant pathology. Prior to entering the department service held a teaching fellowship in botany at Indiana University, was instructor in botany at the University of Maine, and assistant plant pathologist of the Maine Agricultural Experiment Station.	Yrs. Mos.
Roscoe E. Blair ,Bard, Cal	Has been serving as superintendent of the Yuma Experiment Station, near Bard, Cal., and in conducting demonstration work among farmers on the Yuma reclamation project. His duties as farm superintendent include the supervision of all the investigational work of the Yuma station and some field work among settlers on the Yuma reclamation project, with particular reference to the production of long-staple cotton. This work is of special importance at the present time, when the demand for long-staple cotton for both civil and military purposes is exceeding the supply. The Yuma station is located in a section devoted to intensive farming, as shown by the fact that the average production per acre for that district (the Yuma reclamation project) in 1917 was valued at \$105. The work of the station has been a very important factor in the development of local agricultural industries, particularly as regards the two most important industries, cotton and alfalfa seed. He has served also as representative of the office of demonstrations on reclamation projects on the Yuma project, it having been found impossible so far to secure a suitable man for the work of that office.  Graduate Kansas State Agriculture College. Prior to the entering department was employed for a brief period as assistant in the department of horticulture at the Kansas Experiment Station.	7 11
Leonard E. Newman Concord, N. H.	Has charge of cooperative work on the control of the white-pine blister-rust work in New Hampshire. This includes general control work throughout the State, specific local cooperative work with 43 townships, and the direction of the activities of about 75 employees. This blister-rust disease threatens the destruction of the white pine, which is the most valuable and important forest tree in the northeastern section of the United States. The situation is critical; present failure of the cooperative control work in New Hampshire would cause irreparable damage and might easily mean failure	2 1
	for the blister-rust campaign in the entire region. For the continuation and success of the work in New Hamp-	
	shire it is important that Mr. Newman be retained in	
	present position, as he is the only experienced man left who is thoroughly familiar with the work in that State,	
Louis J. Gillespie, Washington, D. C.	he having been with the work ever since it was inaugurated. Graduate Biltmore Forest School. Had 3 years' experience in general forestry work in the Northwest and in New Hampshire before entering the department service. Engaged in working out the relation between crops and soil acidity, involving highly technical experience and training in connection with hydrogen-ion concentration. There are only a limited number of men available for this type of work in the United States, and if he were separated from the service for any reason, this line of work would have to be suspended indefinitely. He is	4 10½
Rolla N. Harger, Washington, D.C.	showing a decided relationship between the hydrogenion concentration in soils and the prevalence of certain diseases affecting prominent food crops.  Graduate Brown University, Ph. B. and Ph. D. Served as assistant in physics, Brown University, instructor in chemistry, Rhode Island School of Design, Providence, fellow in bacteriology, Rockefeller Institute of Medical Research, and bacteriologist, New York Department of Health, for various periods before entering department service.  Engaged in chemical work, requiring highly specialized training, in the office of soil-fertility investigations. It	1 1
	has been found impossible under the present conditions to obtain men of similar training and experience. Since September, 1917, has also been engaged in making investigations of an unusual character in cooperation with gas warfare investigations, Bureau of mines, acting for the Ordnance Department. This special research is invaluable to the prosecution of this line of offensive warfare.	

Name and home address.	Character of work.	Length of service.
Rolla N. Harger, Washington, D. C.	Graduate Washburn College (Topeka, Kans.), A. B.; did graduate work in chemistry at Kansas University 2 terms, receiving M. A. degree. Before entering department was laboratory instructor in chemistry at Washburn College 3 years and laboratory instructor in chem-	Yrs. Mos.
Wofford B. Camp, Gaffney, S. C	istry at Kansas University 2 years.  Engaged in California upon work having in view the increased production of the long-staple Egyptian type of cotton in the United States by the utilization of the improved varieties and cultural methods that have been developed through the experimental work of the department. On account of the reduced production of this type of cotton in Egypt and difficulties of communication and transportation there could be no assurance that enough extra staple cotton would be available in the United States even for the strictly military purposes of aeroplane wings, balloon fabrics, and automobile tires. The production of sea-island cotton has become entirely an uncertainty on account of the boll weevil. The field operations in California consist of locating and caring for plantings of the improved varieties in promising	1 111
	locations, in cooperation with new cotton growing organizations that are being established, and giving necessary advice and assistance required in properly establishing this new long-staple industry in the Southwest. This work involves the direct and active personal supervision of the experimental plantings, which are located throughout the San Joaquin and Sacramento Valleys of California, and includes necessary instruction of farmers in methods of planting, thinning, selecting, roguing, picking, and other operations connected with production, breeding, and preservation of the purity and uniformity of the varieties. The cultural methods of handling these new long staples in the Southwest are different than those used in other regions, and there are no other men obtainable who have had special training like that of Mr. Camp or who are qualified to under-	
	take it.  Graduate Clemson Agricultural College, B. S. Was raised on a farm and was continually in the environ- ment of farm life and work before entering the depart-	
Walton G. Wells, Sacaton, Ariz	ment. Engaged on work directly related to the increased production of cotton of the Egyptian type in the irrigated sections of Arizona and California. The fact that importation of this type of cotton from Egypt has recently been much restricted and that the Arizona and California product is the only available substitute for sea-island cotton, which is of vital importance to the military program of the United States requires that every effort be made to stimulate production of American-Egyptian cotton in Arizona and California. This cotton is already being extensively employed in the manufacture of high-grade tire fabrics, and is being tested for use in the production of balloon fabrics for the Army. In the event of a serious curtailment of the sea-island crop as a result of boll-weevil ravages American-Egyptian is the best available substitute for sea-island cotton in the manufacture of balloon, gas-mask, and airplane fabrics.  Increased production of American-Egyptian cotton is contingent upon (1) the maintenance of a large supply of pure and selected seed for planting and (2) familiarizing the growers with the best methods of production which have been worked out by the department. Mr. Wells has had a longer and more intimate contact with both of these lines of effort than any other man now in the Government service. He is the only employee of the department available for continuous service in the field who has sufficient familiarity with the Egyptian cottod plant to carry on effectively the vitally important work of seed selection. The work is both urgent and continuous in its nature and does not permit of the delay and interruptions which the training of an inexperienced substitute would entail.	6 2

Length of Name and home address. Character of work. Has charge of the extensive experiments in drug-plant growing which are being conducted in cooperation between this department and the University of Wisconsin, the continuance of which is regarded as exceedingly important in the present emergency. The Bureau of Plant Industry, through its cooperation with a number of universities which maintain drug gardens in coinection with their schools of pharmacy, is working to secure the production of as large quantities as possible of several essential drugs. Mr. Mueller not only has had immediate charge of the work of producing these drug crops at the University of Wisconsin, but visits these other institutions as necessity may arise to give expert supervision and advice and assist in promoting the work. There are very few men in the country who have had any practical experience in the line of work in which Mr. Mueller is engaged. It has been found necessary to increase Mr. Mueller's responsibilities by assigning him to emergency fieldwork in connection with the castor-bean crop, in addition to his regular assignment to the production of important drug plants. These duties include collaborating with officials of the Signal Corps, War Department, cooperating with country agents, advising growers, etc., in order to insure castor-bean production on the large acreage required to provide supplies needed in the manufacture of lubricating oil for airplane motors. The withdrawal of Mr. Mueller'sservices would mean the practical abandonment of any productive features of the department's drug-plant work in the northern Mississippi Valley, which is of great importance in producing adequate supplies of important drugs for military needs, and would hinder the cooperative work in producing sufficient castor oil for airplane use.

Graduate University of Wisconsin (pharmacy course), B. S.; was graduate student, same institution, 1 term receiving M. S. degree. Prior to present appointment was for various periods registered pharmacist, had charge of drug-plant work at Wisconsin Pharmacy service. Yrs. Mos. Norbert R. Mueller, Washington, Edgar C. Young, Timmonsville, S. C.

3

Name and home address.	Character of work.	Length of service.
Harry A. Schoth, Corvallis, Oreg	Has charge of forage-crop experiments being conducted in cooperation with the Oregon Agricultural Experiment Station at Corvallis, Oreg., with particular reference to the production of seeds of vetches and other special forage crops. This work is highly important, especially in view of the fact that ordinary sources of supply in Europe are cut off, and it is therefore essential that American sources for seed be developed. The work with forage crops is also highly important in connection with the dairy industry of western Oregon and western Wash-	Yrs. Mos. 2 4½
Fred W. Geise, Washington, D. C	ington.  Graduate Oregon Agricultural College, B. S. and M. S.  For 2 terms was employed as farm foreman and was fellow in agronomy at the Oregon Agricultural College.  Is investigating the fertilizer value of the green sand marl deposits of eastern United States as a source of potash for agricultural purposes. His work consists chiefly of technical laboratory and greenhouse studies, carried on at Washington. His withdrawal at this time would seriously cripple the work and endanger results which, it is hoped, may find practical use during the present	11
	season.  Graduate Wesleyan University (Nebraska), A. B.; took special course in biology at University of Wisconsin; received M. S. degree University of Chicago. Was raised on a farm and is familiar with farming practices in the Middle West.	
Oscar R. Mathews, Bellefourche, S. Dak.	The superintendent of the Bellefourche (S. Dak.) station is an employee of the Office of Western Irrigation Agriculture, the station being under the management of that office. The superintendent is fully occupied with the work in irrigation agriculture and has not been specially trained in dry-land agriculture nor familiar with the details of the work that is being conducted by the Office of Dry-Land Agriculture. Mr. Mathews is the only	9 0
	representative of the last-named office at the Belle- fourche station and is responsible for the conduct of the work of crop production under dry-land conditions, which work has already proved its value by its results. This work involves soil preparation, seeding, cultivation, harvesting the crops, study of yields, effects of cultiva- tion, rotations, etc. He also has charge of the soil moist- ure and other chemical and physical determinations in the laboratory on the field station and has kept the records of the meteorological observations. This work is directly concerned with the increasing of the food supply (particularly wheat) of the country by determin- ing the possibilities of production in this section of the country and the methods by which these possibilities can be most profitably realized. Graduate South Dakota Agricultural College, B. S. and	
Joseph B. Kuska, Colby, Kans	M. S.  Has charge of extensive investigations in methods of crop production under dry-land conditions at the Colby (Kans.) substation of the Kansas State Experiment Station in cooperation with the State. Under the terms of this cooperative agreement the department agrees to provide a trained assistant in dry-land agriculture who shall be responsible for and have immediate charge of the experimental work. Mr. Kuska has had charge of such work since its inauguration in the spring of 1914.  Graduate University of Kansas, B. S. Spent early life on	4 6
Charles H. Ruzicka, Williston, N. Dak.	a farm.  As superintendent of the Williston (N. Dak.) dry-land field station, has charge of an extensive series of experiments being conducted under a cooperative agreement with the North Dakota Experiment Station to determine the best methods of crop production for that section. Under this agreement the department furnishes the superintendent of the station. Wheat and flax production are of first importance in this section, and any advance the experimental work may make in the solution of the many problems concerned in their production adds directly to the total production of these and other essential foodstuffs and raw materials.  Graduate North Dakota Agricultural College, B. S. in agriculture; has also had practical farm experience. Prior to present appointment spent 2 seasons examining and appraising lands in western North Dakota and eastern Montana for the Northern Pacific Ry. Co.; taught 1 year in associated agricultural high school at Milaca, Minn., and was 2 years with the North Dakota Better Farming Association.	5

Name and home address.	Character of work.	Length of service.
Charles T. Dearing, Washington, D. C. (most of his time is spent in the field).	Has charge of the muscadine grape investigations of the bureau, which involves a study of cultural methods and requirements and the breeding of better varieties. His work also includes the development of methods of utilization of grapes in the home. Heretofore the use of the muscadine type of grape has been restricted to the making of wine, canning, and preparation in the fresh state in a few different culinary ways. Mr. Dearing has developed exceedingly satisfactory methods of making unfermented juices, jellies, jams, and other products, and these have been presented at a large number of meetings in cooperation with the Office of Extension Work in the South, through a large portion of the muscadine grape-growing territory.	Yrs. Mos 8 5
Charles Sando, Washington, D. C.	Graduate University of Missouri. His duties are largely of a biochemical nature and consist of making analyses of fruits and vegetables to determine the changes which have taken place when held under different conditions, including storage. Similar investigations are carried on by Mr. Sando with reference to the conditions of fruits or vegetable products grown under different conditions for the purpose of correlating cultural methods with the behavior of the products in storage. Another phase of his work is a study of fruit and vegetable pigments as an index of different degrees of maturity, the degree of maturity being an essential factor to consider in connection with the behavior of the product in storage and subsequent thereto when removed for consumption.	3 1
Elmer Snyder, Fresno, Cal	Graduate Maryland Agricultural College; took advanced work in organic chemistry at the University of Michigan. Engaged upon studies of cultural and production problems in connection with American euvitis grapes and investigations of vinifera grapes in California. The latter project has been under way for the past two years, and, together with another member of the bureau staff, he has been primarily responsible for the results of the investigational work being carried on in some 10 or 12 experimental vineyards located at different points in California. Perhaps the most important feature of his work is in connection with the development of a dried-currant industry. The foundation work, with which Mr. Snyder is very closely identified, has been laid for the development of currant industry in California, which promises to take the place of an imported product amounting annually to 30,000,000 or more pounds. His duties also consist of taking annual series of notes covering blossoming records, growth records, yield records, and observations on numerous methods of culture and	3 0
George K. K. Link, Washington, D. C. (greater part of time spent in the field).	the behavior of a great number of varieties under test. Graduate New York State College of Agriculture. Advises the inspectors of the Bureau of Markets and the War and Navy Departments relative to the investigations of losses in market and storage, and studies means of prevention, working with other pathologists who are at the points of production. This work is an essential part of the food-conservation program, closely affiliated with investigations at the points of production and operating directly to reduce the present losses of perishable vegetables. The economic interests involved in this work are very great. The losses on a single car amount to from \$100 to \$400, a large part of which is preventable by measures applied in the field or packing house. A continued effort is made to disseminate this information among the producers and to bring about all possible improvement.  Graduate University of Chicago, B. S.; graduate student University of Nebraska, I term, receiving A. M. degree; also received Ph. D. degree from the University of Chicago. Assisted in the chemical and botanical laboratories at Chicago University; served as assistant in botany at the Kansas Agricultural College; adjunct professor of agricultural botany and assistant in the experiment station of the University of Nebraska; professor of plant physiology and physiologist of the Nebraska Agricultural Experiment Station; and during the 6 years prior to present appointment has devoted his entire time to university teaching and to investigation and extension work at the experiment station of Nebraska along the line of potato diseases, a great part of this time being spent in field work in the irrigated and	8

Name and home address.	Character of work.	Length of service.
Gustav A. Meckstroth, Washing-	Engaged in bean-disease investigations, having charge of a	Yrs. Mos. 1 3½
ton, D. C.	field station. The protection of the bean crop against disease is a matter of very urgent war service. He has had charge of this work for more than a year and a good beginning has been made. The bean crop is one of the most important of the vegetable crops of the country,	
75.7	and it has been especially subject to losses due to diseases during recent years.  Graduate Ohio State University, B. A. and M. A. For	
	various periods prior to present appointment taught in public schools; assisted in laboratory in general botany, Ohio State University; was an agent of the department in connection with white pine blister-rust inspection; taught general botany and plant pathology at Pennsyl-	
L	taught general botany and plant pathology at Pennsylvania State College, and assisted in plant pathological work at Pennsylvania Experiment Station; was raised on a farm and engaged in general farming in Ohio until	
Luther P. Byars, Washington, D.C.	college course was finished.  Mr. Byars is a project leader and specialist engaged in the investigation of nematode diseases of cotton, truck, and forage plants. Has in charge the Federal investigation	4 7
	on the control of root-knot, a disease which reduces the value of southern crops by many millions of dollars annually, and is engaged in a campaign of crop conservation with a program of root-knot control from the At-	
	lantic States to Texas. Experiments are in progress which must run continuously for a series of years. On these the department has spent a great deal of money for installation and care, and the results will be lost if	
	they are suspended. No one is available to take Mr. Byars's place should he leave the service. Experts in nematology are rare.  Graduate Clemson College; received M. S. degree from	
	University of Wisconsin, and examination for Ph. D. degree has been successfully passed and degree will be granted upon completion of thesis. Was assistant in plant pathology at the South Carolina Experiment Station I year, assistant in botany at the University of	
	Wisconsin 2 years, and plant pathologist at South Carolina Experiment Station 1 year. Prior to taking up permanent work in the department was employed by this bureau to do nematode disease survey work on sugar beets and other plants.	
Arthur J. Mix, Washington, D.C. (greater part of time spent in field).	Engaged in emergency work in the control of truck and forage crop diseases, in cooperation with the extension organization of one of the Northwestern States. His	1
. ====	duties include personal instructions to county agents and farmers, the holding of farmers' institutes and county-agent meetings, the preparation and distribution of printed matter, and the supervision of demonstrations of disease-control methods. The position requires a man well trained in plant pathology and experienced in	1
	man well trained in plant pathology and experienced in demonstration work. Graduate Hamilton College, A. B.; also received Ph. D. degree from Cornell University. For 4 years held a fellowship at Cornell University, during which period	
	he conducted an educational campaign during the grow- ing season in disease and insect control and the general care of orchards. For 1 year was assistant botanist at	
William L. Doran, Amherst, Mass.	the New York Experiment Station, Geneva, investigating potato diseases; and for 2 years was instructor in plant pathology at the University of Kansas.  Is extension pathologist for the State of Massachusetts,	7
	and is engaged in putting into practice in that State, with the cooperation of the State extension forces, the methods of control of important diseases of truck crops that have been worked out. The work to which he is assigned is a necessary link in the food-conservation	
	program. The position of extension pathologist is one requiring a man of thorough training in plant pathology and related subjects and wide experience.  Graduate Massachusetts Agriculture College, B. S., specializing in botany and chemistry; did postgraduate work in plant pathology 1 year and received degree of	
	M. S. During college course worked on larms in summer, especially with market garden and florist crops: lived 18	i i
	years on a farm; instructor in botany, New Hampshire State College, and assistant botanist, New Hampshire Agricultural Experiment Station, 1 year.	

Name and home address.	Character of work.	Length e
Ivan C. Jagger, Washington, D. C. (greater part of time spent in field).	Is pathological adviser on truck-crop diseases for the Southern States, having general charge, on the part of the Bureau of Plant Industry, of the cooperative extension activities in the South along this line. He plans campaigns for the control of diseases of truck crops, visits the bureau workers in the States and the cooperating State officials, prepares circulars and bulletins, conducts correspondence, and in other similar ways carries on the campaign for food conservation through the control of plant diseases.  Graduate Cornell University, B. S., in agriculture; graduate student and industrial fellow in department of plant pathology, same institution, 1 year; graduate student in University of Wisconsin 1 year, receiving M. S. degree, after specializing in plant pathology; grad uate student and instructor in department of plant pathology at Cornell, 1 term. Before entering department spent 4 summers in the field in New York State carrying	Yrs. Mo
	ology at Cornell, I term. Before entering department spent 4 summers in the field in New York State carrying out experiments on the control of diseases of vegetables; for 5 years was assistant professor of plant pathology, University of Rochester and Cornell University, all his time being given to investigation of diseases of vegetables, both in greenhouses and in field in the vicinity of Rochester, N. Y	
Max W Gardener, Washington, D. C. (greater portion of time spent in field).	Engaged in assisting the food products inspectors of the Bureau of Markets in the inspection of carload lots of perishable vegetables at terminal markets, the purpose of this work being to determine the causes of the large losses which occur in transit and to assist in the prevention of these losses through the introduction of control measures. This work is an important part of the program of food conservation through the control of plant diseases and requires men highly trained in plant pathology and possessing unusual teaching ability. Graduate Michigan Agricultural College, B. S.; also received M. S. and Ph. D. degrees from University of Wisconsin. Prior to present appointment served for various periods as pathologist and chemist, Keokuk Canning Co.; assistant plant pathologist to the Pennsylvania State chestnut blight commission; assistant in plant pathology, Michigan Agricultural Experiment	2 9
Howard G. MacMillan, Washington, D. C. (temporary summer address; Greeley, Colo.).	plant pathology, Michigan Agricultural Experiment Station; and during 3 summers held a 3 months' appoint- ment in this bureau as assistant in charge of cucumber disease investigations in Wisconsin; was also instructor in plant pathology, University of Michigan. Engaged in the investigation of control methods for potato diseases in Colorado, and has charge of important field stations. Has spent 3 years in the work and now has re- sults which he believes will effect important improve-	3 10
	ments in the control of potato diseases in the irrigated West.  Graduate Brown University, Ph. B.; also received M. S. and Ph. D. degrees from University of Wisconsin. Prior to present appointment was employed for short periods by the Bureau of Plant Industry in connection with chestnut-blight investigations in the control of fruit dis-	ı
Lawrence O. Watson, Florence, S. C.	eases.  Is pathological adviser in charge of work on disease control for cotton and truck crops in all Southern States, representing the Bureau of Plant Industry in all its relations to southern extension work along these lines. Has also been engaged for a number of years in breeding and disseminating disease-resistant cotton and cowpeas and is the man on whom the bureau depends for the preservation and conduct of this important project. Has built up an efficient corps of cooperators and pushed with especial activity since the war the more extended use of resistant cotton as a means of disease control. Has organized and now directs this disease-control work in cooperation with the State authorities in North Carolina, South Carolina, Georgia, Louisiana, Texas, Arkansas, Florida, Alabama, Mississippi, and Oklahoma. The work, though new, is already having an influence on crop production. The county agents are continually in need of help from the experienced pathologists of this bureau.	7 0
	bureau, Graduate Clemson Agricultural College, B. S. in agriculture; 1 year of graduate work at the University of Illinois, Was raised on a farm and is familiar with the details of farm work. Before entering upon department duties was for 2 years assistant chemist in State analytical work at Clemson College, S. C.; served as assistant to the county auditor at intervals during vacation periods; and was assistant botanist at the South Carolina Agricultural College 1 year.	

Name and home address.	Character of work.	Length of service.
John C. Walker, Washington, D. C. (greater part of time spent in field).	Engaged in the investigation of onion diseases and in pathological inspection work in cooperation with the Bureau of Markets and the War Department investigating pathological problems connected with the handling and transportation of vegetables.  Graduate University of Wisconsin, M. S. and Ph. D.; took 1 semester of graduate work at Cornell University. Was born and raised on dairy and truck farm and had practical experience in growing cabbage, onions, potatoes, sugar beets, and other truck crops prior to entering the department. College work was directed chiefly to studies in plant pathology, especially diseases of truck	Yrs. Mos. 8½
Jenkin W. Jones, Biggs, Cal	crops.  Has charge of the Biggs (Cal.) cereal field station of the Bureau of Plant Industry. This is the only experiment station devoted to the rice industry in the entire western United States. The experiments carried on there include the determination of the best varieties of rice for California conditions; the best times, rates, and methods of sowing rice to obtain the maximum production; the best methods, times, and rates of irrigation to	5 10
	conserve irrigation water and at the same time insure a large production; rotation systems to free rice land from weeds, etc. The station is comparatively new, but is recognized as the source of all authentic information on rice growing in California. The many farmers who are taking up rice growing for the first time in 1918 are very largely dependent upon the station for their information. Graduate Utah Agricultural College, B. S. in agriculture. Was raised on a farm and prior to entering department	
Harry Braun, Washington, D. C	had charge of a demonstration farm at Harlowton, Mont. As a scientific assistant in the laboratory of plant pathology, is engaged in research studies in the new wheat disease in the Middle West known as black chaff. He does both field and laboratory work and is at present the only well-trained man the laboratory of plant pathology has in the field. It is important that the work be pushed as rapidly as possible, owing to the number of States involved and the serious nature of the disease. Men fitted to prosecute such a research are hard to find, practically all of them being within the draft age. Mr. Braun worked last season on this wheat disease and	1 9½
	knows the problems involved. Graduate Cornell University, B. S.; took postgraduate course at same institution, specializing in plant pathology; also did graduate work at Columbia University in botany 1 term, receiving M. A. degree. Prior to present appointment was for various periods assistant, department of plant pathology, Cornell University; student assistant and scientific assistant, office of cotton, truck, and forage-crop disease investigations, this bureau.	
John W. Pace, Mobile, Ala	Has been engaged in connection with the cooperative campaign for the eradication of citrus canker in Alabama for more than 2 years and has proved to be unusually efficient inspector and superintendent; and experience has shown that it would be impossible to replace him with any satisfactory person. He has immediate supervision of the inspection and eradication work in Baldwin County, Ala., and occasional supervision over the work in Mobile County. In Baldwin County approximately a million Satsuma orange trees are planted. Since 1914 the citrus industry of the South has been menaced by the presence of the Japanese disease of citrus canker, which is not only very destructive to trees that become infected but also destroys the commercial value of the fruit. At present quarantine prevents the shipment of fruit from infected districts. It is becoming almost impossible to find new inspectors for responsible positions in the canker-eradication work, which makes it imperative to retain the inspectors who have proved their ability to inspect citrus plantings and detect canker and who have the necessary executive ability to plan and supervise the work of others.  Graduate Alabama Polytechnic Institute, B. S. Was raised on a farm.	

Name and home address.	Character of work.	Length of service.
Alma Wilson, Logan, Utah	Engaged as pathological adviser, in cooperation with the State extension forces of Utah, in putting into practice the methods of control developed for important diseases of truck crops. This work is important and is a necessary link in the food-conservation program. The position of extension pathologist is one requiring a man of thorough training in plant pathology and related subjects and wide experience.  Graduate University of Utah, B. S. Was instructor in general botany at Utah Agricultural College 4 semesters, laboratory instructor in plant pathology 2 semesters, and laboratory instructor in plant physiology 5 semesters. Had 2 years' research experience in potato diseases at the Utah experiment station and some experience in plant-disease survey and in plant-disease extension work in Utah prior to entering department service.	Yrs. Mos. 6½

### BUREAU OF ENTOMOLOGY.

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Character of work.	Length of service.
Directs the field work being conducted at the various field stations of the Bureau of Entomology in connection with the campaign for the eradication and control of the sweet potato weevil, and coordinates the department's activities with similar work undertaken by State organizations. The work is closely allied to the emergency food production conservation program, inasmuch as the sweet potato weevil has been spreading unchecked until the present year and is becoming extremely threatening. The sweet potato is a staple food not only of the people of our Southern States, but on the Army ration. Graduate Pomona College, with 1 year's postgraduate work at that institution.  Demonstrates methods of controlling serious insect pests of staple crops. Men of the type capable of performing entomological extension work are extremely difficult to find, and the importance of the work, judged by their results obtained through their efforts, makes it extremely desirable to retain their services. Mr. Batchelder is the only extension entomologist now operating in the State of Maine.  Graduate of an approved college, having taken the course in entomology: also had practical experience before entering the department fitting him for service as demon-	Yrs. Mos. 6 11
Demonstrates methods of controlling serious insect pests of staple crops. Graduate of an approved college, having taken a course in entomology; also had practical experience before entering the department fitting him for service as demonstra-	5
Has charge of the operations at one of the bureau's field stations in connection with the eradication campaign against the sweet potato weevil. Mr. Courtney is especially familiar with local conditions in the section in which he is employed. Graduate of an accepted agricultural college, having specialized in entomology.  Has charge of the operations at one of the bureau's field stations in connection with the eradication campaign against the sweet potato weevil.  Graduate of an accepted agricultural college, having specialized in entomology.	3 O
	Directs the field work being conducted at the various field stations of the Bureau of Entomology in connection with the campaign for the eradication and control of the sweet potato weevil, and coordinates the department's activities with similar work undertaken by State organizations. The work is closely allied to the emergency food production conservation program, inasmuch as the sweet potato weevil has been spreading unchecked until the present year and is becoming extremely threatening. The sweet potato is a staple food not only of the people of our Southern States, but on the Army ration. Graduate Pomona College, with 1 year's postgraduate work at that institution.  Demonstrates methods of controlling serious insect pests of staple crops. Men of the type capable of performing entomological extension work are extremely difficult to find, and the importance of the work, judged by their results obtained through their efforts, makes it extremely desirable to retain their services. Mr. Batchelder is the only extension entomologist now operating in the State of Maine.  Graduate of an approved college, having taken the course in entomology: also had practical experience before entering the department fitting him for service as demonstrator and public speaker.  Demonstrates methods of controlling serious insect pests of staple crops.  Graduate of an approved college, having taken a course in entomology; also had practical experience before entering the department fitting him for service as demonstrator.  Has charge of the operations at one of the bureau's field stations in connection with the eradication campaign against the sweet potato weevil. Mr. Courtney is especially familiar with local conditions in the section in which he is employed.  Graduate of an accepted agricultural college, having specialized in entomology.  Has charge of the operations at one of the bureau's field stations in connection with the eradication campaign against the sweet potato weevil.  Graduate of an accepted agricultural college, havin

# ASSISTANTS IN TRUCK CROP INSECT INVESTIGATIONS.

These employees are men of considerable experience in the Bureau of Entomology who, by reason of demonstrated ability in research, life-history studies, and investigations and experiments in control measures in connection with truck-crop insects, have been placed in charge of bureau field stations in various localities. The character of the research investigations which they are conducting demands that men ex-

perienced and trained in the particular lines be employed in their prosecution. All these employees are working on problems of research closely allied to the present conservation program.

Deferred classification has been requested by the department and allowed by draft

boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Lengt	
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Roy E. Campbell, Alhambra, Cal.	Has charge of field station dealing especially with sugarbeet insects. College graduate, having specialized in entomology.	Yrs. A	0
Fred A. Johnston, Kingsville, Tex.	Has charge of 1 of the bureau's field stations in connection with the eradication campaign against the sweet-potato	.8	0
Corwin F. Stahl, Spreckles, Cal	weevil. College graduate, specializing in entomology. Engaged in study of insect transmission of curly top of sugar beets, probably the most serious disease of this crop in the United States. College graduate, specializing in entomology.	6	0
Francis M. Wadley, Wichita, Kans.	Has charge of general truck-crop insect investigations at the bureau's field station at Wichita, Kans. College	4	0
C. F. Moreland, Baton Rouge, La	graduate, specializing in entomology.  In connection with the sweet-potato weevil-eradication campaign, is engaged in a survey of the food plants of this insect in order to determine all the facts possible regarding its feeding habits. This investigation is very essential to the effective prosecution of control measures. Mr. Moreland is fitted for this character of work by reason of his special botanical training and especially his familiarity with the flora of southern Louisiana.  Graduate Louisiana State University, B. S. and M. S.; prior thereto attended Washington and Lee University I year. Was raised on a farm. Prior to entering department service was instructor in botany at the Louisiana State University.		2
A. J. Ackerman, Bentonville, Ark.	Has charge of field experimental work in the control of apple insects in the Ozarks. This work has a direct bearing on increased food production.  Graduate Massachusetts Agricultural College, B. S.	4	0
L. C. Antles, Grand Junction, Colo.	Has charge of the bureau's investigations of the codling moth in the Grand Valley, Colo., which involves large-scale spraying operations in the control of this insect. Graduate Colorado Agricultural College, B. S., also took post-graduate work at the Pennsylvania State College. Before entering the department service had 3 seasons' experience in orchard-insect work in the Grand Valley, Colo.		2

#### EXTENSION AGENTS IN DECIDUOUS FRUIT INSECT CONTROL.

Deferred classification has been requested by the department and allowed by draft boards in the cases of the following agents engaged in extension work in deciduous fruit-insect control. This work involves the giving of demonstrations of the proper methods of controlling insects affecting deciduous fruits. It has a direct bearing on increased food production and, in view of the scarcity of men trained along this line, it would be very difficult to replace those now in the employ of the department.

Name and home address.	Character of work. (See also general statement.)	Length of service.
J. M. Robinson, Raleigh, N. C Oliver I. Snapp, Agricultural College, Miss. E. W. Atkins, Ames, Iowa	Graduate University of Miami, B. S.; also received degree of M. S. from the Ohio State University. Graduate Virginia Polytechnic Institute, B. S.; also took post-graduate work in entomology at the Maryland State College of Agriculture. Is specialist in beekeeping in cooperation with the extension services of Missouri, Iowa, Kansas, and Nebraska. This work includes field demonstrations and lectures among beekeepers, in cooperation with county agents. It has been increasingly difficult to find men of the proper training and experience for this type of extension work. Five vacancies now exist in the staff engaged upon this work, which so far it has been found impossible to fill. Graduate Ontario Agricultural College, Guelph, Ontario. Prior to entering department served as deputy apary inspector in Ontario and as specialist in apiculture at the Nebraska Experiment Station; also was engaged as commercial beekeeper in Ontario.	Yrs. Mos. 9 1 9 7

Name and home address.	Character of work. (See also general statement.)	Length of service.
D. J. Caffrey, Hagerstown, Md	Has charge of the laboratory investigations on wireworms and cutworms; also work on European cornstalk borer in New England. These pests are responsible for tremendous losses in food crops.	Yrs. Mos. 5 1
Frank S. Chamberlin, Quincy, Fla.	Graduate Massachusetts Agricultural College; also did post- graduate work at that institution. Prior to present ap- pointment was for 3 months assistant to the entomolo- gist of Massachusetts Experiment Station, and for 2 years assistant to the State entomologist of Connecticut. Has charge of a substation at Quincy, Fla., investigating the tobacco budworm and other important tobacco in-	1112
	sects.  Received 2 years' training at the Worcester Polytechnic Institute, and graduated from Massachusetts Agricultural College, B. S. For 2 summers before entering the department held the position of deputy State nursery inspector of Massachusetts.	
T. R. Chamberlin, Salt Lake City, Utah.	Conducts control experiments with respect to the efficacy of certain cultural methods in the control of alfalfa weevil. Is the only fully experienced assistant remaining on this investigation, the 2 other older assistants having recently left the service, one for military duty and the other to engage in State work.	5 . 6
Bert R. Coad, Tallulah, La	Attended University of Utah.  Has charge of the bureau laboratory which conducts investigations of the cotton boll weevil in the Mississippi delta. He has had years of training in the bool-weevil work.  Graduate University of Illinois, majoring in entomology. Served under the State entomologist after graduation for some time before entering the department.	6 6

## ASSISTANTS IN COTTON-BOLL-WEEVIL CONTROL.

These assistants are engaged in practical experiments in the control of the cotton-boll weevil, especially in the determination of the proper methods of using arsenate of lead. It is necessary to retain their services, at least during the present crop season, on account of the difficulty that has been experienced in obtaining men familiar with the cotton-boll-weevil problem. These men have been especially trained for the work upon which they are engaged.

Name and home address.	Character of work (see also general statement).	Length of service.
Webb B. Williams, Tallulah, La F.C. Craighead, East Falls Church, Va.	Attended Mississippi Agricultural and Mechanical College for several years, specializing in entomological work. Concerned primarily in the conservation, through the prevention of insect damage, of forest products, especially those used by the Army and Navy. Very much timber especially valuable to the Army and Navy is rendered unusable because of insect injury. The investigations conducted by Mr. Craighead have made and are making it possible to recommend control measures which will prevent this damage. The position is one which no training other than that gained through experience can be of immediate service.	Yrs, Mos. 2 7½ 7 0
C. W. Creel, Forest Grove, Oreg  W. M. Davidson, Sacramento, Cal.	Graduate Pennsylvania State College, B. A.; took post- graduate work at George Washington University.  In charge of a large and important field station located at Forest Grove, Oreg., and of all the investigations of the bureau on the clover flower midge, alfalfa seed chalcis, Hessian fly, and grasshoppers under way in the Pacific Northwest. Is directing a special campaign during the present season for the suppression of grasshoppers, the Coulee cricket, and the clover flower midge in an effort to produce a full crop of red-clover seed. Graduate University of Nevada, B. S.; subsequently was assistant to the State entomologist of Nevada 2 years. Engaged in the investigation of predatory insects, espe-	7 4
vi. a. Davason, bactamento, Cal.	cially the ladybird beetles, in cooperation with the California State horticultural commission. This work involves carefullife-history studies of the insects in question and their liberation in orchards on a practical scale where they are likely to become established.  Graduate Leland Stanford University. B. S.	

Name and home address.	Character of work. (See also general statement.)	Length	
A. B. Duckett, Bladensburg, Md	At the present time is the only well-trained assistant in the stored-product insect branch of the Bureau of Entomology. He not only takes charge of the office during the absence of the branch chief but has recently been assigned the very important task, in cooperation with the War Department, of reporting to the chief storage officer of the port of New York the condition of Federal supplies purchased and stored at the Bush terminals in New York. This is a distinct war service.	Yrs. M	708. 3½
William O. Ellis, Riverton, N. J	Graduate Maryland State College of Agriculture.  Has charge at Riverton, N. J., of the bureau's investigations of the recently introduced Japanese beetle. This work involves careful life-history studies of the insect, its behavior, and experimental work in the field to effect its control. Mr. Ellis is also assisting in the work of the eradication of the beetle now under way.  Graduate Lebanon Valley College (Annville, Pa.), A. B.; pursued postgraduate studies at the Iowa State College, specializing in advanced botany and general and research	1	0
W. T. Emery, Wichita, Kans	entomology; also took postgraduate work at Cornell University, specializing in economic entomology and advanced zoology.  Engaged as the ranking assistant in the Hassian fly investigations located at Wichita, Kans., and is conducting biological work in connection with these activities, with which he alone is entirely familiar.  Graduate Kansas State University, A. M. Subsequently was assistant to the Kansas entomological commission	4	1
A. I. Fabis, Brownwood, Tex	for 1 year.  Has charge of the bureau's laboratory at Brownwood, Tex., where investigations of pecan insects are being carried out in that region. This work involves careful life-history studies of the important insect enemies of this crop and the carrying out in the field of large-scale experiments	.4	4
R. J. Fiske, Roswell, N. Mex	in their control.  Graduate College of the City of New York, B. S.; also completed 1 year's work in entomology at Cornell University.  Has charge of the bureau's investigations of the codling moth in the Pecco Valley, N. Mex., involving careful life-history studies of the insect and large-scale field experiments in its control.	3 :	10
A. L. Ford, Manhattan, Kans	Graduate Massachusetts Agricultural College, B. S.; previous to entering the department was acting in charge of the entomological work of the Porto Rican agricultural experiment station.  Engaged as special field agent in extension work for the State of Kansas. Was assigned to this work at the urgent request of the State director of extension and State entomologist, in order to prevent the suspension of the entire entomological extension program, and is conducting important demonstration work on the control of insects affecting the production of winter wheat.	1	10
John B. Gill, Monticello, Fla	Graduate Kansas State Agricultural College, M. S. For 3 years previous to present appointment was assistant in entomology at this institution.  For 5 years has had charge of the bureau's investigations of pecan insects in the South, with headquarters at Monticello, Fla. This work involves careful life-history studies of the important insect enemies of the pecan and the carrying out in the field of large-scale experiments in the	8	0
Rudolf W. Glaser, Forest Hills, Mass.	control of these insects.  For several years he has had charge of the investigation of the wilt disease which destroys gipsy-moth caterpillars. This has required a technical study in order to determine the causative organism of wilt. He is now working on a bacterial disease introduced from Japan, which affects gipsy-moth caterpillars. These experiments are only	5	2
Chas. C. Hill, Carlisle, Pa	partially completed.  Has charge of a branch of the Hessian fly investigations east of the Allegheny Mountains. The work he is performing is of a peculiarly technical nature.  Student at Harvard College, graduate Massachusetts Agricultural College, B. S. Prior to entering depart-	4	0
Thomas E. Holloway, New Orleans, La.	ment was nursery inspector in Massachusetts for 1 year. Has charge of the bureau laboratory at New Orleans, La., where investigations of the sugar-cane insects and the Argentine ant are undertaken. Is at present in Cuba obtaining parasites for introduction into the United States for the control of the sugar-cane moth borer. The moth borer is one of the principal enemies of cane, and now menaces the future of the cane-sugar industry in this country. The only possible hope of controlling this pest is by the introduction of parasites. Graduate Texas Agricultural and Mechanical College. Engaged in entomological work for the Texas Experiment Station 2 years before entering the service of the department.	9	0

Name and home address.	Character of work. (See also general statement.)	Length of service.	
Robt. H. Hutchison, Washington,	Mr. Hutchison is the bureau's authority on the house-fly	Yrs. Mo. 4 11	8.
D.C.	and its control. He has also been engaged upon an inves-	4 11	2
	tigation regarding the life history and control of the body and head lice commonly called "cooties." The cootie		
	problem has opened up many fields for investigation, and unless the work is continued the matter may be dropped completely and important and necessary information		
<sup>n</sup> ·	will not be obtained. He is also cooperating with the		
	Chemical Warfare Service in connection with tests that are being made of all poisonous gases now used in warfare	,	
	with a hope that possibly some gas may be available which could be used for freeing the men wearing masks		
	of all cooties. Also, at the request of the Medical Depart-		
	ment, he is testing an unusual apparatus for the control of the cootie. In cooperation with the Quartermaster's Department, Mr. Hutchison is engaged in experiments	,	
	to determine the effect of all processes of laundry and dry- cleaning establishments for the control of the cootie. He		
	Is thoroughly familiar with the technique of breeding the		
	Graduate La Fayette College (Pa.); took post-graduate		
H. G. Ingerson, Lakewood, Ohio	cootie, and has a thorough grasp of the whole subject. Graduate LaFayette College (Pa.); took post-graduate work at the University of Pennsylvania. Has charge of the bureau's investigations of grape insects,	4 2	
	volves careful life-history studies of the insects and carry-		
	ing out in vineyards of large-scale experiments in their control. It is also necessary for Mr. Ingerson to visit		
	various vineyardists in the grape-growing territory and instruct them in methods of insect control.		
Dwight Isely, Bentonville, Ark	Graduate Pennsylvania State College, B. S. Has for some years had charge of the bureau's investigations	4 0	
_ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	of grape insects in the northeast Pennsylvania grape belt. At present is assigned to an investigation of apple insects	4 0	
	in the Ozarks, with headquarters at Bentonville, Ark.		
	This work involves careful life-history studies of impor- tant apple insects and the carrying out in the field of		
	large-scale experiments in their control. Graduate Fairmont College (Wichita, Kans.), A. B.; re- ceived degree of M. A. from Kansas University.		
Dettmar W. Jones, Melrose High-	Engaged on experimental work in connection with the in-	4 0	į
lands, Mass.	troduction of parasites of the gipsy moth and the brown- tail moth and is carrying on special investigations on		
Willard V. King, New Orleans, La.	several introduced species. For several years represented the Bureau of Entomology in	9 0	
	the studies of pellagra undertaken by the Thompson-McFadden commission. For several seasons following this work, had charge of the bureau's work in Montana		
	this work, had charge of the bureau's work in Montana on the Rocky Mountain spotted-fever tick. The winter		
	seasons were spent by Dr. King in malaria-mosquito investigations in New Orleans, where he made an unusual		
	record. During 1916 he discovered that a species of mosquito which has heretofore not been considered an effi-		
	cient carrier of malaria can do so. He also conducts special investigations on the body louse and is a recog-		
	nized authority on medical entomology.		
Max Kisliuk, jr., Miami, Fla	Graduate Montana Agricultural College; also received de- gree of Ph. D. from Tulane University.	1 0	,
max months, j., miani, ria	Engaged in control work on the army worms which are doing serious injury to plantings of castor beans in Flor-	1 8	2
	ida; also in working out measures for controlling other castor-bean insects. The Signal Corps of the Army has made large contracts for plantings of castor beans in order		
	that a sufficient supply of oil may be available as a lubri-		
	cant for airplane motors. Conditions on these planta- tions are so serious that the bureau is concentrating all		
	the men it can spare on the problem. Graduate Maryland Agricultural College; did post-graduate		
	work at the Ohio State University, receiving his master's degree from the latter institution.		
E. W. Laake, Dallas, Tex	Engaged in work on live-stock insect pests, and in cooperative experiments with the Bureau of Animal Industry in	4 11	- das
	the control of insects in meat-packing establishments. Graduate Texas Agricultural and Mechanical College, B. S.		
M. C. Lane, Forest Grove, Oreg	Has assisted in the grasshopper control and investigational work in the northwestern part of the country. At pres-	1 6	
•	sent is engaged in the clover-seed chalcis campaigns in the		
	Pacific Northwest.  Graduate Massachusetts Agricultural College, B. S., ma-		
	joring in entomology. Prior to department appointment was a deputy nursery inspector of Massachusetts and had		
	practical experience in bee management.		1

Name and home address.	Character of work. (See also general statement.)	Length of service.
B.R. Leach, Winchester, Va	Has charge of the bureau's laboratory at Winchester, Va., where investigations are being carried out on the important apple insects in that region. The comparative merits of dust and liquid sprays in the control of these insects is being worked out. Mr. Leach has had considerable experience along this line.  Graduate Cornell University, B. S.	Yrs. Mos. 4 4
T. F. McGehee, Tallulah, La	conducted at Tallulah, La. He has had experience in this investigations during the past four years.	4 10
R. B. McKeown, Medford, Oreg	Graduate Mississippi Agricultural and Mechanical College. Assists in codling-moth investigations in the Rogue River Valley, Oreg., with headquarters at Medford. Creducto Coloreda Agricultural College B. S.	1 0
William M. Mann, Washington, D. C.	Graduate Colorado Agricultural College, B. S. Has devoted practically all his time to studying and classifying ants referred to the Bureau of Entomology, and recently has completed a very thorough survey of Cuba and the Bahamas to determine injurious insects, including ants, which might be introduced either through commerce or on nursery stock into the United States. Can speak the languages in vogue in practically all of the countries requiring special investigation to determine injurious insects likely to be introduced, and is also familiar with the conditions existing in these countries. Attended Washington College of Agriculture 2 years; also 2 years at Leland Stanford Junior University, receiving the degree of B. A. from the latter institution; subsequently received degree of D. S. from Harvard University. Prior to entering the Government service spent 6 years in studying ants under the direct supervision of Dr. W. M. Wheeler, who is the world's recognized authority on this group of insects. In addition, has devoted 2 summers to study at the Marine Biological Laboratory, and for 2 years held a traveling fellowship from	0 10
	Harvard for ant work in the Fiji and Solomon Islands and Australia. Other explorations were made by him in Brazil, Bolivia, Mexico, Haiti, Arabia, Syria, Bahama	
Harold Morrison, Washington, D. C.	Islands, and various parts of the United States. Is entomological explorer in charge of an insect survey of the West Indian Islands and Central and South American countries. This survey has particular relation to fruit flies and other insect pests of plants and plant products likely to be brought into the United States through the agency of commerce from the regions designated. He is also in charge of the collection of fruit flies and other pests from the regions named which are being collected and forwarded to the Bureau of Entomology from time to time by various official entomologists, directs the correspondence and the work of various collaborators, and makes personal surveys to check up the work and to supplementit with such specific studies as may be necessary to secure the desired information over the entire field. He has already completed a preliminary survey of the Virgin Islands, San Domingo, and Cuba, and, in addition, has made a specific study of the citrus black fly, a dangerous insect which has not yet gained a foothold in the States, in Cuba, Jamaica, and the Canal Zone. The importance of keeping out injurious insects affecting tropical and subtropical fruits which have not yet gained entrance into the continent is well recognized. Graduate Cornell University, B. A.; also received degree of M. A. from Leland Stanford University. For 5 years was assistant to the State entomologist of Indiana, devoting most of his time to the inspection of foreign and domestic nursery stock and the determination of insects and plant diseases. Prior to present appointment was entomological inspector of the Federal Horticultural Board.	
G. F. Moznette, Miami, Fla	Has charge of field work in the study of the life-history, habits, and means of control of fruit files and other insect enemies of mango, guava, avocado, and other subtropical fruits which are being commercially developed in southern Florida. Healso cooperates with the Federal Horticultural Board and has charge of the inspection and safeguarding of plants grown in the plant introduction garden at Miami, Fla., maintained by the Bureau of Plant Industry. This project covers an important field of special fruit development in southern Florida and is particularly important because of the location at Miami of one of the department's principal plant-introduction gardens and because of the proximity of this region to Cuba and the Bahamas, which under existing traffic conditions renders it very subject to possible invasion by a number of serious fruit insect enemies, which are known to occur in the West Indies.	0 11

Name and home address.	Character of work. (See also general statement.)	Length of service.
G. F. Mozonette, Miami, Fla	Graduate Oregon Agricultural College, B. S.; did 1 year's postgraduate work at University of California. Prior to present appointment was assistant entomologistat the Oregon Agricultural Experiment Station for 2 years and served for 1 year as entomological inspector in the Federal	Yrs. Mos.
Paul R. Myers, Carlisle, Pa	Horticultural Board.  Is ranking assistant attached to Hessian-fly investigations east of the Alleghany Mountains. Prior to present employment was assistant in the Department of Agriculture of Pennsylvania 4 years and assistant in the U.S. Natical Massimus 4 ye	4 0
E. J. Newcomer, Portland, Oreg.	tional Museum 4 years.  Engaged in investigations of important peach insects.  Graduate Leland Stanford University, A. B.; also took  postgraduate work in entomology at this institution.	4 1
C. M. Packard, Berkeley, Cal	Has complete charge of the Hessian-fly investigations in California. Also cooperates in the grasshopper-control work carried on in that State.	5 0
J. H. Paine, Washington, D. C	Graduate Massachusetts Agricultural College, B. S. Was assistant in horticulture at the college 2 years. Engaged in orchard insect survey work. This work involves making observations on important deciduous-fruit insects. In addition, Mr. Paine is an insect photographer.	5 6
H. R. Painter, Charleston, Mo	Graduate Leland Stanford University, B. S. Assists in investigations of the Hessianfly, chinch bug, and billbug at the bureau's station at Charleston, Mo. Graduate, Oklahoma Agricultural and Mechanical College, B. S. Was subsequently assistant State entomologist	
F. W. Poos, Charlottesville, Va	of Oklahoma.  Conducts field operations in connection with the experimental control of the wheat jointworm, which has been very injurious throughout the winter-wheat belt for the past 2 years.  Graduate University of Kansas, M. A. Was assistant to	1 0
B. A. Porter, Wallingford, Conn	the Kansas entomological commission 1 year and agent for the Florida State plant commission 1 year. Has been engaged in life-history studies of parasites attack- ing deciduous-fruit insects. Has accumulated consider- able data in connection with the life histories of these	1 0
Dean A. Ricker, West Lafayette, Ind.	parasites.  Graduate Massachusetts Agricultural College, B. S.  Engaged as assistant in the long-term experiments in connection with the investigation of the Hessian fly and white grub, having charge of field plots and other work in northern Indiana.	3 0
L. P. Rockwood, Forest Grove, Oreg.	Graduate Massachusetts Agricultural College, B. S. Was assistant in gipsy-moth control work 1 year prior to present appointment.  Is ranking assistant at the bureau's Forest Grove (Oreg.) laboratory. Is engaged in active field work in connection with the campaign for the increased production of red-clover seed through the suppression of the clover seed	6 5
S. A. Rohwer, East Falls Church, Va.	chalcis and clover flower midge. Graduate Massachusetts Agricultural College, B. S. Was employed 1 year as assistant in mosquito control work in Massachusetts. Has charge of the eastern field station of the branch of forest insects. The primary problems investigated by him are (a) phenological records on plants and insects in relation	8 10
	to the bioclimatic law; and (b) work on insect galls for the purpose of obtaining an American substitute for those galls which heretofore have been introduced and form a necessary ingredient in the manufacture of record inks, especially those used in the Treasury Department. These galls also supply necessary properties in certain useful dyes and form one source of supply of gallic and tannic acids. This work is of such a nature that it can	
	be conducted only by one who can qualify by the training gained through experience.  Attended University of Colorado, specializing in biology and allied sciences, work at university being supplemented by independent researches of a technical nature; received special training under the direction of 2 very	
John V. Schaffner, jr., Sherborn, Mass.	prominent American entomologists.  Has been conducting experimental work in the field in the control of gipsy and brown-tail moths, and for the past	6 7
E. R. Selkregg, Washington, D. C.	3 or 4 years has had charge of a section of the work. Has charge of life-history investigations of the oriental peach moth at Arlington Farm, Va., which involves careful life-history studies of the insect as a basis for determining means of control. This insect has recently been discovered and is proving to be a serious pest of peach, pear, apple, quince, and other fruits. Graduate Massachusetts Agricultural College, B. S.	4 0

Name and home address.	Character of work. (See also general statement.)	Lengt servi	
Melvin B. Shepherd, Melrose	Has been employed for past 5 years in colonizing imported	Yrs.	Mos.
Highlands, Mass.	parasites of the gipsy and brown-tail moth and making collections from colonies liberated in order to determine the success of the plantings. Has a thorough knowledge of the location of different parasite colonies throughout the infested area in New England, also the methods used in handling parasitic material at the laboratory.		·
E. H. Siegler, Wallingford, Conn	Has been continuously engaged in investigations of deciduous-fruit insects and their control and is a specialist in apple-insect investigations, being in charge of this line of work for the bureau in different localities. Is at the present time in charge of the bureau's laboratory at Wallingford, Conn., devoted to the investigation of important apple insects. This work includes a large amount of careful life-history studies of orchard insect	7	1
	pests and more especially the carrying out in the field of large-scale spraying, dusting, and other experiments in insect control.		
Arnold P. Sturtevant, Washington, D. C.	Graduate Pennsylvania State College, B. S. Engaged in a study of the causes and treatment of bee diseases. Also examines samples sent in by beekeepers from all parts of the United States for determination. The Bureau of Entomology has full knowledge of work done by experiment stations and other agencies, and no other bacteriologist could be secured to do this work.	1	6
	Graduate Clark University; did post-graduate work at Massachusetts Institute of Technology. Prior to present appointment was assistant to professor of bacteriology, Massachusetts Institute of Technology; was also specialist in bee diseases, experiment station. Amberst, Mass.		
Chester F. Turner, West Lafayette, Ind.	Has charge of Hessian-fiy investigations at Nashville, Ill. Graduate Kansas State Agricultural College, B. S. Sub- sequently was nursery inspector in Kansas and assistant in gypsy-moth control in Massachusetts I year.	4	7
R. H. Van Zwaluwenburg, Hagerstown, Md.	Engaged in a campaign for the control or extermination of the European cornstalk borer, a dangerous European pest which has recently become established in eastern Massachusetts. Graduate Massachusetts Agricultural College, B. S., majoring in entomology. Prior to present appointment was entomologist at the insular experiment station, Mayaguez, P. R.		8
W. B. Wood, Washington, D. C	Has charge of experimental work being carried out on the Arlington Farm in the control of the oriental peach moth, which involves large-scale spraying experiments in the application of insecticides to determine the best means of controlling this insect. Mr. Wood has had a wide range of experience in life-history studies and control operations in connection with deciduous-fruit insect investigations.	7	2
T. Scott Wilson, San Antonio, Tex.	Graduate Kansas Agricultural College, B. S. Is the sole assistant attached to the entomological field laboratory located at San Antonio, Tex. Is conducting an insect survey of Texas, in cooperation with the State and bureau extension entomologists. Is also cooperating with these specialists in the insect-control work. Graduate University of Kansas, A. B. Subsequently was	5	3
H. K. Plank, Seaview, Wash	teacher of zoology and biology 1 year.  Has charge of the bureau's laboratory at Seaview, Wash., where investigations of cranberry insects are being carried out in cooperation with the Washington Agricultural Experiment Station.	4	5

### BUREAU OF BIOLOGICAL SURVEY.

### BIOLOGICAL ASSISTANTS IN RODENT-CONTROL WORK.

Prairie dogs, ground squirrels, jack rabbits, pocket gophers, and other rodent pests occupy hundreds of millions of acres of public domain and private lands in the West. A considerable part of 17 States is occupied by these pests, which exist in such enormous numbers that they are highly destructive both to crops and to grazing. The losses in food crops alone are estimated from \$6,000,000 to \$9,000,000 annually in North Dakota, \$20,000,000 in Montana, and approximately \$30,000,000 in California. The losses in the other States involved are in proportion to the cultivated area.

Through the investigations of its field experts the Bureau of Biological Survey has develored methods of destroying these posts on a large scale and at small cost even

developed methods of destroying these pests on a large scale and at small cost even

with the present high prices of material. The methods employed by this bureau in rodent-control work have been developed within the past three or four years, and as a result the only available specialists who have a sufficient knowledge of the work to handle it effectively are the extremely limited number of men who have been employed in it.

Each of these assistants is in charge of rodent campaigns in the destruction of these pests over vast areas. Through cooperation with the State extension services thousands of farmers are working under the direction of these experts in exterminating rodent pests. In North Dakota during the present season 33,000 farmers are working in the campaign organized by one of these men, and it is expected that more than 13,000,000 acres of land will be largely freed from ground squirrels and that a great increase in the grain output of that State will result. The bureau's expert, in combination with the State extension service, is planning a still greater campaign next year. In Montana about 20,000 farmers are engaged in a rodent campaign under the direction of one of these men. In New Mexico the State council of defense has allotted money to be expended under the direction of one of the bureau's assistants in a campaign against noxious animals in order to increase the food output of that State the present year, and the result has been so gratifying that the chairman of the council has requested that this cooperation be repeated the coming year.

Everywhere in the States where the bureau is working the communities are putting

up many thousands of dollars, and the farmers are cooperating in constantly growing numbers, owing to the obvious saving of food resulting from the wholesale destruction of rodents which maintain themselves throughout the season by feeding upon planted There is a demand for more than double the number of experts that are now available for this work. To take away the few competent men engaged on these projects would leave the bureau without the necessary force to carry on the work and would deprive it of the necessary experts to train the additional men needed, as well as to continue the important campaigns now in progress.

The State directors of extension work, farmers, and others in the States where this work is being conducted agree in the opinion that it is directly adding many millions of dollars to the food output of the country each season. The effects of the work are so apparent that the public demand for assistance and assignment of experts to guide local campaigns far exceeds the bureau's ability to comply.

Deferred classification has been requested by the department and allowed by draft

boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.	
Gilbert F. Bateman, Tucumcari, N. Mex. Ray T. Jackson, Laramie, Wyo G. Donald A. Gilchrist, Flagstaff, Ariz. Urban S. Ebner, Fargo, N. Dak G. Charles F. Bliss, Albuquerque, N. Mex.  Benjamin B. Richards, Provo, Utah. James Silver, jr., Denver, Colo G. Cedrio R. Landon, San Angelo, Tex.	raduate North Dakota College of Agriculture  ttended the Colorado Agricultural College 2 years, specializing in biology.  raduate Colorado College of Agriculturedo  raduate North Dakota College of Agriculture  raduate Pennsylvania State College, B. S., specializing in forestry; also took special training in advanced physiology and ecology at the University of Minnesota, obtaining a degree of M. S. in forestry.  raduate Kansas Agricultural College  raduate Colorado College of Agriculture.  redatory-animal inspector. Has had charge of the bureau's predatory-animal campaigns in Texas 3 years. Has developed an efficient force of hunters and managed the work successfully. He has secured the hearty support of the ranchmen and live-stock associations, which are supplying funds for the employment of additional hunters under his supervision. His experience with conditions on the Texas ranges and his knowledge of the available competent hunters, as well as his acquaintance-ship among the live-stock growers and their confidence in him, are assets of great value in connection with the work in that region. It is difficult to find experienced men for the predatory-animal work, even under normal conditions.	Yrs. 1 1 5 3 2 7 2 5 3	Mos. 111 4 8 7 111 111 3 0 7 7

# BUREAU OF CROP ESTIMATES.

#### FIELD AGENTS.

Each field agent of the Bureau of Crop Estimates is required to keep so thoroughly Each field agent of the Bureau of Crop Estimates is required to keep so thoroughly in touch with the agricultural conditions in his territory that he can not only make accurate reports to the department for publication month by month but that he may be considered the highest authority on such matters in his State. These objects are accomplished by (1) travel and close study to learn at first hand acreages planted, relative changes in condition of crops, and probable yield; (2) personal interviews with the best-informed men in each section; (3) extensive circularization of the territory, for which purpose large lists of individuals trained in reporting crop conditions are maintained; and (4) the maintenance of detailed records acquired by ditions are maintained; and (4) the maintenance of detailed records acquired by crop-reporting methods in previous years, as well as records from all other sources possible, such as assessors' returns, census reports, etc., so compiled as to facilitate comparison and study. These duties are incidental to the issuance of the regular crop report each month. In addition special reports are frequently required to be made, which usually involve special trips to restricted areas, preparation of mimeographed inquiries, tabulation of returns, and report to Washington.

Deferred classification has been requested by the department and allowed by draft boards in the case of five field agents of the Bureau of Crop Estimates. Each is an experienced man whom it would be difficult to replace and whose services in connection with the present and prospective food supply are of great importance during the continuance of the war. Unquestionably the retention of these men in their present positions is necessary to the adequate and effective operation of the cropreporting service, and none of them could be replaced without substantial, material Furthermore, each represents an investment by the Government of a large sum of money in preliminary training, getting acquainted with his territory, and becoming familiar with methods and sources of estimating crops and live stock, which can be acquired only in the service of the Bureau of Crop Estimates. If any of these men should leave the bureau several months would be lost in obtaining a successor through the Civil Service Commission, and a year or more would be required to train his successor to the point where his judgment would be sufficiently developed to be of value.

Name and home address.	Character of work. (See also general statement.)	Length of service.	
Aaron E. Anderson, Lincoln, Nebr. Hal F. Bryant, Charleston, W. Va Guy Fitzpatrick, Missoula, Mont Harry O. Herbrandson, Water- town, S. Dak. Julius H. Jacobson, Blackfoot, Idaho.	in agriculture; first 18 years of life spent on farm. Graduate University of Kentucky, B. S. in agriculture	5 8 4 0 5 4	

### FRUIT AND TRUCK CROP SPECIALISTS.

Crop specialists, as a rule, maintain no lists of reporters. Most of their information is gained by travel and by interviewing large numbers of individuals. The informais gained by travel and by interviewing large numbers of individuals. The information thus gathered is used to supplement, and as a check against, similar information gathered from other sources by the bureau or its field agents. The territory of crop specialists is more extended than that of field agents. The productive region for fruit and truck crops is divided according to the number of assistant crop specialists available. The truck crop specialists are assigned certain territories extending across the country from south to north, and their travel is regulated by the progress of the trucking season from south to north. Their reports are submitted weekly by telegraph to the chief truck crop specialist at Washington and are considered in connection with information obtained from other sources, resulting in the issuance by the bureau information obtained from other sources, resulting in the issuance by the bureau of weekly and semimonthly truck crop reports. The fruit crop specialists devote special attention to surveys of apple and peach growing sections. Their travel is continuous, and the results of their observations, together with the returns from printed inquiries among orchardists, are embodied in monthly reports. Deferred classification has been requested by the department and allowed by draft boards in the case of four crop specialists. Each is well qualified for the work to which he is assigned, before receiving appointment having passed a rigid civil-service examination requiring a basic knowledge of scientific agriculture, statistical methods, etc. The withdrawal of any one of these men would result in substantial, material loss and detriment to the adequate and effective operation of the crop-reporting service. Furthermore, like the field agents, these crop specialists represent an investment by the Government of a large sum of money in preliminary training, getting acquainted with their territory, and becoming familiar with methods and sources of estimating fruit and truck crops, which can be learned only in the service of the Bureau of Crop Estimates.

Name and home address.	Character of work. (See also general statement.)	Length of service.
Charles G. Carpenter, New Orleans, La. J. Clifford Folger  R. G. Risser, San Francisco, Cal. Samuel M. Thomson, Washington, D. C.	Assistant truck crop specialist, whose territory extends throughout the United States. Fruit crop specialist, whose territory extends throughout the United States. Graduate Washington State College of Agriculture, B. S. in horticulture; candidate for Ph. D. in agricultural economics. Assistant truck crop specialist, whose territory extends throughout the United States west of the Mississippi. Assistant fruit crop specialist, traveling extensively throughout the United States. Graduate Cornell University, B. S. Prior to present appointment, had several years' service and wide experience with fruit crops in the Office of Farm Management of this department.	Yrs. Mos. 1 2 2 0 1 6 4 3

### STATES RELATIONS SERVICE.

#### COOPERATIVE AGRICULTURAL EXTENSION WORK.

The cooperative extension act of May 8, 1914, provided for a Nation-wide system of instruction for the farming population in agriculture and home economics outside of the schools and colleges. It established a close copartnership between the Federal and State agencies in the organization and administration of the extension service. When a state of war was declared it was realized that the cooperative extension system, with its combination of Federal and State administrative officers and specialists, county agents, home demonstration agents, farm bureaus, and other local organizations, furnished a ready and effective means for the Nation-wide dissemination of the needed facts, as well as for practical demonstrations of the best methods of increasing agricultural production and securing the most economical utilization of the products of the farm. Recognizing the importance of this great system, Congress appropriated \$4,348,400 for its immediate development. This involved the rapid extension of the work to all sections of the Union and necessitated the employment of a large number of additional county agents, home demonstration agents, club agents, and the like, at the very time when the department was losing many of its most effective and trained employees.

The cooperative extension service, as now developed, consists of a well-organized field force reaching into most of the agricultural counties in the United States, through which the Department of Agriculture, and other Federal agencies acting in cooperation with it, as well as State and county agencies, are able to reach the farmers in a very direct way and to assist them in the difficult problems presented during the continuance of the war. In each State there is a director of extension, with administrative assistants and specialists. There is also a county agricultural agent in each of 2.450 counties, and a county home demonstration agent in each of 1.800 counties.

of 2,450 counties, and a county home demonstration agent in each of 1,800 counties. The county agents work with and through various organizations, such as farmers' associations, farm bureaus, county councils of agriculture, county councils of defense, and the like. In a large part of the United States the organization extends to every community in each county, with voluntary workers in each community organization acting in consonance with the National and State forces in the matter of food production and conservation. Through this organized force the needs of the Nation in food production are made known to the farmers, and they are assisted in planning their work so as to best meet these needs. In this way the farmers are aided in locating supplies of seed, in securing fertilizer and farm implements, in the prevention of out-

break of animal diseases, in the control of plant diseases and insect pests, in the utilization of better farm implements to save labor, and community cooperation to supply labor, and in securing the assistance of city and town people in supplying the labor needs of farmers. They are also assisted in dealing with problems of marketing and storage, prevention of waste, conservation, saving of fuel, etc. Assistance is rendered to farm women in the problems of gardening, dairying, poultry raising, canning, preserving, drying, and otherwise conserving food for future use, as well as the utilization of food and the substitution of foods which are plentiful for those which are scarce.

These agents also render valuable assistance in Liberty loan, Red Cross, war savings, and other campaigns, and aid local draft boards in considering of furloughs from the Army for agricultural purposes. They supply the Department of Agriculture with accurate information regarding production, outbreaks of disease among animals and plants, outbreaks of insect pests, and difficulties in marketing, and keep the Government posted generally regarding all matters affecting agriculture within the counties.

#### STATE AGENTS AND COUNTY AGENT LEADERS AND ASSISTANTS.

State agents in charge of county-agent work are usually selected from men who have been successful county agents. Their duties are to supervise the work of their assistants and, through them, of the agents, to carry the food-production program of the Federal department and the State agricultural colleges to the farmers of the State and of each county through the organized efforts of the district and county agents, and to assist them in adapting it to the agricultural possibilities of the county. They maintain relationships with the specialists at the agricultural college and in the Federal Department of Agriculture and adapt their campaigns to the work of the county agents. They receive, compile, and summarize the reports of the agents and

report upon the work to the extension director and to the department.

Assistant State agents or district agents and assistant county agent leaders have a prescribed territory consisting of a number of counties in which county agents are located. Under the administrative direction of the director of extension and the State agents these men travel from county to county and supervise the work of the county agents. They perfect the necessary financial arrangements before a county agent is employed, check up on the agent's method of conducting his work, give him instructions and guide him on questions of policy, and assist him in all problems of organization. They also aid the county agent in carrying to the people any agricultural plan or campaign outlined by the department and the college. They perfect the plans for the work of specialists coming from the colleges and the department to assist county agents, and, in short, deal with all the problems and all the types of work of the county agent in an administrative way.

As a rule, a district agent supervises the demonstration work of from 12 to 25 counties, Deferred classification has been requested by the department and allowed by the

draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.
Thomas L. Asbury, Madison, Ga	Graduate Georgia State College of Agriculture, B. S. Was reared on farm and has had practical experience in dairying and general farm work.	Yrs. Mos. 2 11½
Spencer B. Cleland, St. Paul, Minn.	Graduate Minnesota College of Agriculture. Since gradu-	3 10
James M. Gray, Asheville, N. C	ation has done farm-survey work in Minnesota. Graduate Agricultural and Mechanical College of North Carolina, B. S.; took post-graduate studies. Was reared on a farm. While in college spent 2 summers on farm and 2 summers in college dairy. Managed farm 1 year.	3 6
Dewitt T. Hardin, Chattanooga, Tenn.	Graduate Clemson College; also received M. S. A. degree in University of Tennessee. Reared on a farm. Assisted in short-course work; official tester for the Tennessee Experiment Station 2 years.	4 3
Albert L. Love, Nashville, Tenn	Graduate Mississippi Agricultural and Mechanical College, B. S.; attended summer schools Mississippi Agricultural College and University of Chicago; took post-graduate course Mississippi Agricultural College, 1 year; George Washington University. Was reared on a farm, has worked and managed several farms in Mississippi, and is familiar with general crop production. Taught school	3 5
Paul W. Monohon, Orono, Me	4 years.  Graduate University of Maine, taking agricultural course.  Was assistant to dean of College of Agriculture, Orono,  Me., 1 year; also assistant to director of extension.	1 10

Name and home address.	Character of work. (See also general statement.)	Length of service.
William E. Morris, Olivia, Minn	Graduate Wisconsin College of Agriculture. Was assistant in feed and fertilizer inspection and dairy tests, Wiscon- sin Experiment Station, 2 terms; also had charge of animal husbandry and dairy department of the La Crosse	Yrs. Mos. 4 10
George E. Piper, Manhattan, Kans.	County School of Agriculture.  Graduate Michigan Agricultural College, B. S. Prior to present appointment edited agricultural supplement for Associated Publishers' Syndicate; was foreman on a 6,000-acre live stock and grain ranch in Montana.	3 3
Harvey C. Ray, Little Rock, Ark	Spent 4 years at the State school, Missouri, Lincoln Insti- tute; 2 years' post-graduate course at Tuskegee Insti- tute, Alabama; specialized in general agriculture and farming. For 3 years was superintendent of agricultural department, Langston University, Langston, Okla. Was raised on a farm and has a very practical knowledge	3 6
Carl M. Rose, Lexington, Miss	of all kinds of farm operations.  Graduate Mississippi Agricultural and Mechanical College; took postgraduate work in agriculture at Cornell Univer- sity. Prior to present appointment was for 2 years man- ager of a large plantation in Mississippi; afterwards	9
Phil Sheldon, Lincoln, Nebr Lewis A. Toan, Rochester, N. Y	served as county agent. Attended University of Nebraska College of Agriculture. Graduate Cornell University, B. S. A. Was farm manager 4 years after leaving college. Taught agriculture in high school 1 year. Was manager Monroe County farm bureau 4 years.	10 11
Hu S. Vandervort, Morgantown, W. Va.	Graduate West Virginia University, B. S. in agriculture; postgraduate work, same institution. Was reared on a farm. Prior to present appointment served as county agent 3 years.	2 11
Wylie R. Ward, Omaha, Nebr	Attended Wesleyan University 1 year; graduate college of agriculture, University of Nebraska, B. S. Was in- structor in agronomy at University of Nebraska 2 terms.	10
Lawrence A. Wickland, Omaha, Nebr. N. C. Wickland, Omaha, Nebr	Graduate Nebraska University, B. S. in agriculture; taught school. Graduate Nebraska University, B. S. Taught school 4 years before and 1 year after graduating; also engaged in	7 10
Collett E. Woolman, Baton Rouge, La.	farming. Graduate University of Illinois, B. S. in agriculture. Spent 6 months abroad studying agriculture in England, France, Germany, and Holland. Farm reared, with extensive practical farm experience.	4 9½

### COUNTY AGENTS AND ASSISTANT AGENTS.

A county agent is a joint employee of the United States Department of Agriculture, the State agricultural college, and the county government, or some organization in the county. Generally he is a graduate in agriculture of a State agricultural college, has had practical experience in farming, and possesses personal qualifications for

leadership in agriculture.

His duties are to secure the cooperation of farmers in conducting on their farms—with their own laborers, tools, and equipment and at their own expense—cooperative demonstrations to illustrate better farm practices in the raising of crops, feeding of live stock, and, in many cases, in farm management and marketing. He disseminates information generally to farmers—either to individuals upon request or through organized communities, meetings, etc. As a general rule, he has the cooperation of some county or community organizations of farming people whereby he is enabled to reach the largest possible number of persons. These organizations also give the farmers an opportunity to take an active part in planning the program for the county agent work so as to meet the real needs of agriculture in the respective communities. Where there are existing organizations of farmers, he works through them, if possible. He brings to the farmers of the county on their own farms the agricultural information of the Department of Agriculture and the State agricultural colleges. His entire efforts are directed toward improving agricultural conditions, the introduction of the best methods, and the solution of difficult problems confronting the farmers.

An important part of his duties relates to the introduction and development of the live-stock industry, the standardization of breeds, and the organization of farmers for the control of live-stock diseases, such as hog cholera and black leg. In this work, he cooperates with the live-stock disease control agencies of the State and Nation. He teaches farmers how to prevent damage from insects and organizes them to control insect pests and plant diseases whenever outbreaks occur. He cooperates in this work with the entomological and pathological specialists and those in charge of in-

sect and plant-disease control.

During the war he has a large number of other duties. The agricultural campaigns or programs are carried out locally under his leadership. It is his duty to advise farmers regarding the needs of the Nation with reference to production, marketing, conservation, and the like, and to suggest ways of meeting them.

This work is done through some county organization, whether it be farmers' assoor the direction of the farm-help specialists of the Department of Agriculture, and generally takes charge of all extension work in the county regarding food production, prevention of waste in production, storage, and marketing.

The farm-labor situation has presented many difficulties since the United States entered the war. The county agents have rendered valuable assistance in dealing with the problem, especially in determining the farm-labor needs of the county, registering available laborers, and supplying farmers with labor at the time needed. They have also emphasized the necessity of cooperation among farmers in the use of

labor, machinery, and equipment.

The county agents have actively cooperated in the Red Cross, Liberty loan, war saving, and other special war campaigns. Because of the wide experience that these men have already had and the contacts that they have established in the counties, it would seriously interfere with the food-production and conservation campaigns if their services were to be discontinued. The work performed by them requires not only practical experience in farming but technical knowledge as well.

Assistant county agents have training and experience similar to that of the county agents. They are located in populous agricultural counties, working as assistants to

and under the direction of the county agents.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name and home address.	Character of work, (See also general statement).	Lengi	
		Yrs.	Mos.
Andrew H. Barnett, Camden, Ala.	Graduate Alabama Polytechnic Institute, B. S. A. Has practical knowledge of farm work and the care and breeding of live stock.	2	4
William D. Barton, Prattville, Ala.	Graduate Alabama Polytechnic Institute, B. S. A.; also took a summer course in chemistry. Had practical farm experience; for 2 years after leaving college managed farm of an agricultural school.	3	7
Frank R. Curtis, Demopolis, Ala	Graduate Alabama Polytechnic Institute. After gradua- tion, worked on his own farm for a short time; was then assistant manager of a plantation of 5,000 acres.	4	7
Loyd J. Hawley, Troy, Ala	Graduate Alabama Polytechnic Institute. Had practical farm experience.	3	9
Robert C. Lett, Tuscaloosa, Ala. (box 606).	Attended Alabama Polytechnic Institute. Has had practical farm experience.	4	5
James A. McLeod, Union Springs,	Graduate Alabama Polytechnic Institute, B. S. in animal	3	0
Ala.	industry. Had practical experience in farming before entering college. Was assistant in animal industry at Alabama Polytechnic Institute 15 months after gradua- tion.		
Lewis C. Pace, Eutaw, Ala	Graduate Agricultural College of the University of Tennes- see, B. S. Had practical farm experience. Taught agri- culturein an agricultural high school 1 year after leaving college.	0	9
George H. Stewart, Wedowee, Ala.	Graduate Alabama Polytechnic Institute; took post- graduate work at University of Wisconsin. Had practi- cal farm experience.	0	10
Joseph P. Wilson, Andalusia, Ala	Graduate Alabama Agricultural College, B. S. Had practical farm experience. Taught school 4 years after leaving college.	2	3
Emmitt S. Barrentine, Mammoth Spring, Ark.	Graduate Mississippi Agricultural and Mechanical College, B. S.; took post-graduate work. Has had practical farm experience. Had 3 years' experience in teaching rural schools.	0	9
Stanley D. Carpenter, Harrison, Ark.	Graduate Mississippi Agricultural College, B. S. Has had practical farm experience. Taught in agricultural high school 2 years. Was employed 1 year with the Florida State plant board in citrus-canker eradication work.	0	9
James E. Critz, Marion, Ark	Graduate Mississippi Agricultural College, B. S. Had practical experience in all kinds of farm work. Was teacher in agricultural high school a year and a half.	1	6
George R. Ely, Little Rock, Ark. (old courthouse).	Graduate State Agricultural College of Pennsylvania, B. S. Taught animal husbandry in agricultural school 3 years. Was for 16 months seed and fertilizer inspector for the commissioner of agriculture in Arkansas. Has had practical farm experience.	0	41/2

Name and home address.	Character of work. (See also general statement).	Leng	
		Yrs.	Mos.
Joel Lambert, Pine Bluff, Ark Herbert A. McPherson, McGehee, Ark.	Has practical knowledge of all farm operations.  Graduate Mississippi Agricultural and Mechanical College, B. S. Has had actual farm experience. Was for 2 years	6 1	
Colin D. Gunn, Starke, Fla	plantation manager.  Graduate Florida Agricultural College, B. S. Has had	1	8
Tom B. Brandon, Claxton, Ga	practical farm experience. Graduate Clemson Agricultural College, B. S. For 2 years before entering college had full charge of his father's farm.	0	8
Walter S. Brown, Hiawassee, Ga	Graduate Georgia State College of Agriculture, special- izing in animal husbandry. Has had 12 years' experi- ence in practical farming and stock raising. Has taught	0	13½
Esten G. Cromartie, Hinesville, Ga.	in rural schools.  Spent 2 years at eleventh district agricultural school, Douglas, Ga., 2 years at Gordon Institute, Barnesville, Ga., and 1 year at University of Georgia, receiving B. S.	0	8
	degree in agriculture at the latter institution. Worked in the office of the Georgia State board of entomology and in the field in boll-weevil work and assisted in cotton experiments over the State. Taught in agricultural		
Hendrick L. Cromartie, Albany, Ga.	school. Attended Georgia State College of Agriculture. Spent 10 years on his father's farm; also had charge of a 400-acre farm before engaging in demonstration work.	4	4
Wade P. Huie, College Park, Ga	Graduate Georgia Agricultural College, A. B. and B. Ph. Has had extensive practical farm experience.	0	9
William H. Sorrells, Leesburg, Ga.	Graduate Georgia State College of Agriculture. Had 1 year's experience as principal of rural high school prior to present appointment.	0	8
Russell O. Bate, Cynthiana, Ky	Attended University of Tennessee for short courses in agriculture. Has had practical experience in farming.	1	11
Armiel Carman, Clinton, Ky	Graduate University of Kentucky, B. S. in agriculture. Had practical farm experience.	1	_
Robert S. Clough, Benton, Ky	Had practical farm experience.  Graduate University of Missouri, B. S. in agriculture.  Has had practical farm experience. Was school teacher and superintendent of schools.	1	
Angus N. Gordon, Henderson, Ky. (care of chamber of com- merce).	Graduate University of Kentucky, B. S. in agriculture. Had practical farm experience. Was instructor in agriculture at University of Kentucky for a short time.	2	
William J. Harris, Bardwell, Ky	culture at University of Kentucky for a short time. Graduate University of Kentucky, B. S. in agriculture. For a year was manager of a 15,000-acre plantation in South Carolina. Was instructor of animal husbandry in the college of agriculture, University of Kentucky, and agricultural editor for the Lexington Herald.	0	8
Howard H. Harrison, Stanton, Ky.	Received course in agriculture at Berea College. Has had practical farm experience. Taught agriculture at Oneida Institute, Oneida, Ky., 1 year. While a student at Berea College assisted in county-agent work,	1	21/2
Charles L. Hill, Calhoun, Ky	Graduate Oregon Agricultural College, B., S. Had experience working in large orchards in Oregon during summer vacations. For 3 years after graduation engaged in farming.	0	9
Samuel J. Lowry, jr., La Grange, Ky.	Attended Berea College; graduate University of Kentucky, B, S, in agriculture. After graduation managed 500-acre farm for 2 years and managed a seed farm for several months.	1	1112
John L. Miller, Campbellsville, Ky.	Attended Washington and Lee University 1 year and Peabody College 4 terms. Spent summer vacations on the farm while attending college. Taught school 1 year. Graduate University of Kentucky, B. S. in agriculture.	0	6
Gordon B. Nance, Smithland, Ky.	Graduate University of Kentucky, B. S. in agriculture. Familiar with all farming operations. Supervised city school gardens 1 year.	0	7
Warner W. Owsley, Louisville, Ky. (Board of Trade Building).	Graduate University of Kentucky, B. S. in agriculture. Has had practical farm experience. For 1 season was tester for county coveresting association	0	7
Wayland Rhoades, Independence, Ky.	Graduate University of Kentucky, B. S. in agriculture; was student assistant in dairying. Spent some of his vacations on his father's farm, 2 summers on the Kentucky Agricultural Experiment Station farm, and 1	3	3
Fred H. Spickard, Dixon, Ky	summer managing his father's farm of 275 acres. Student in agriculture, University of Kentucky. Has had 10 years' experience in farming and teaching.	0	7
Charles L. Taylor, Bardstown, Ky.	Attended Western Kentucky State Normal School, taking the work offered in agriculture and assisting in the work of the school farm; also student in agriculture 1 year at University of Wisconsin. Had practical farm experi-	4	$5\frac{1}{2}$
John T. Taylor, Louisville, Ky.	ence. Graduate University of Kentucky, B. S. in agriculture.	3	7
(care of Board of Trade). Berlie Winton, Hawesville, Ky	Has had practical farm experience. Graduate in agriculture, Berea College. Has had prac-	0	7
Felix Bachemin, jr., Covington,	tical farming experience and has taught school. Graduate college of agriculture, Louisiana State Univer- sity. Has had experience as a teacher in rural high	0	112

Name and home address.	Character of work. (See also general statement.)	Length of service.
Claud A. Brewer, Oberlin, La	Graduate Mississippi Agricultural and Mechanical College; 4 months' post-graduate work. Was for a time instruc- tor in agricultural schools. Had practical farm experi-	Yrs. Mos.
Louis A. Broussard, Lake Charles, La. (box 742).	ence. Graduate in agriculture, Louisiana State University. After leaving school managed a plantation in southern Louisiana,	0 3½
Thomas H. Casanova, Abbeville, La.	Graduate Mississippi Agricultural and Mechanical College; also took post-graduate work. Had practical farm experience.	2 9
Corliss C. Chapman, De Ridder, La.	Graduate Louisiana State Normal; took special course in rural school work, with agriculture. Taught agricul- ture 5 years, including 3 years as principal of an agricul- tural school. While in this position was active in boys' and girls' club work, in cooperation with extension	3 9
Harry J. Chatterton, Homer, La	workers, Graduate Alabama Polytechnic Institute. For several years engaged in agricultural high-school work in Louisiana. Managed father's farm 2 years. Conducted beef-feeding experiments for the Bureau of Animal Industry, U. S. Department of Agriculture, and the Alabama Experiment Station 2 years prior to present appointment.	0 10
William M. Crumpton, Ruston, La.	Graduate Mississippi Agricultural and Mechanical College, Taught agriculture I year after graduation, Has excellent farm experience.	0 5
Adolph Bernard Curet, New Roads, La.	Graduate Mississippi Agricultural and Mechanical College. Is an experienced, practical farmer. Graduate State Normal School, and took agricultural	1 7½
Sidney J. Durand, Ville Platte, La.	short course at Louisiana State University. Taught 3 years in public school and 5½ years in high school. Had practical farm experience.	0 8
William A. Givens, Ruston, La	Graduate college of agriculture of Louisiana State University. Has had practical farm experience.	1 31/2
Thomas J. Griffin, Houma, La	Graduate Louisiana State Normal School. Had practical farm experience. Was principal and agriculturist of an	0 9
Bush M. Jackson, Monroe, La	agricultural school.  Graduate Clemson Agricultural College, degree in agricul-	2 0
Lou H. La Rue, Jennings, La	ture. Has had extensive practical farm experience. Graduate in agriculture, Missouri State University. Taught agriculture 1½ years, during which period much of his time was devoted to boys' and girls' club work	0 9
Lewis H. Martin, New Orleans, La.	in that section. Familiar with practical farm work. Graduate Louisiana State University; also graduate New York State College of Agriculture. Has had practical farm experience. Was manager of a large ranch in	3 10
Alfred A. Mendoza, Opelousas, La.	southern Louisiana 2 years, Graduate in agriculture Louisiana State Normal, Was principal of rural schools, where he conducted club work and school gardens, Experienced in practical farm	0 4
Beraud L. Mestayer, Garyville, La.	work. Took teachers' course at Louisiana State Normal, special- izing in agriculture. Later employed as agricultural teacher in the various high schools, and while so em- ployed did considerable work among farmers in his com-	2 0
Thomas H. Milliken, Bastrop, La.	munity along demonstration lines. Graduate College of Agriculture, Louisiana State Univer-	10
Joseph O. Montegut, Gonzales, La.	schools in agriculture at Louisiana State University.	1 2
Thomas W. Patten, Arcadia, La	Has had extensive farm experience. Graduate Mississippi Agricultural and Mechanical College. Taught agricultural subjects and sciences in county agri-	10
Paul D. O. Perkins, Lake Charles, La.	cultural high school. Had extensive farm experience. Has had large and varied practical farm experience. Was superintendent of the Angleton substation, Texas Agricultural Experiment Station, prior to present appoint-	4 11
Clarence P. Scurlock, Mansfield,	ment. Received technical training in agriculture at Iowa State	4
Emmett S. Shumate, Jonesboro, La.	College. Taught for 4 years in rural schools.  Received technical training at Louisiana Industrial Institute and Louisiana State University. Hashad practical	6
Robert L. Sloan, Colfax, La	farm experience.  Graduate agricultural course North Carolina Agricultural and Mechanical College; took postgraduate work in the same institution. Has had extensive practical farming	1 .1
Fenwick A. Swann, Marksville, La.	experience. Taught in agricultural high school.  Graduate College of Agriculture, Louislana State University. Has had extensive practical form experience.	3 10½
Everett L. Talbot, St. Martins- ville, La.	sity. Has had extensive practical farm experience. Graduate Louisiana State University. Was high school principal 4 years.	8
ville, La. George C. Vidrine, Houma, La	Graduate Southwestern Louisiana Industrial Institute. Has had several years' practical farming experience.	1 0

Name and home address.	Character of work. (See also general statement.)	Length of service.
Francis H. Whitaker, Winnsboro,	Graduate Mississippi Agricultural and Mechanical College.	Yrs. Mos.
La.	Taught agriculture in high school 2 years. Had practi- cal experience in farming. Graduate Michigan Agricultural College, B. S.; also re-	
Erwin O. Anderson, Denton, Md	Has had practical farm experience. Was assistant pro- fessor of farm management at Pennsylvania State Col-	11
Eston F. Fox, College Park, Md	lege. Graduate Juniata College, Huntington, Pa., A. B.; also took advanced work in agriculture, Maryland State College. Taught in rural school 1 year and was instructor in high school 2 years. Devotes practically all his time	7½
Pinckney A. Hauver, Frederick, Md.	to boys' club work.  Graduate Maryland State College, B. S. in agriculture.  Has had practical farm experience. Prior to present appointment was teacher of agriculture in high schools;	1 4½
Oliver C. Jones, Centerville, Md	was also county club agent 1 summer. Graduate Pennsylvania State College, B. S. in agriculture. Has been engaged in farming all his life. Graduate Pennsylvania State College, B. S. in agriculture.	1 6
Clarence Z. Keller, Princess Anne, Md.	Graduate Pennsylvania State College, B. S. in agriculture. Spent his summer vacations in practical farm work, the last summer having entire charge of a 200-acre farm. Prior to present appointment was instructor in agriculture for 2 years in high school, during which time he organized boys' clubs and community and county fairs.	1 1
Louis H. Martin, Princess Anne, Md.	Graduate Hampton Institute. Engaged 4 years in practical farm work.	1 31
Albert G. Middleton, Oakland, Md.	Graduate Pennsylvania State College, B. S. in agriculture. Spent summer vacations on farms. After graduation managed 2 farms. Taught agriculture 1 year in high	1 3½
Riley G. Arnold, Sardis, Miss	school.  Graduate Alabama Polytechnic Institute, B. S. A. After graduation taught agriculture for 3 years.	3 0
Thomas W. Bailey, Ashland, Miss.	Graduate Mississippi Agricultural and Mechanical College, B. S. Had experience managing farms before taking up the county-agent work.	2 6
Milson M. Bedenbaugh, Booneville, Miss.	Graduate Mississippi Agricultural and Mechanical College, B. S. After graduation taught for 3 years in an agricul- tural high school and had charge of the high-school dem-	9
Tohn T. Belue, Lauderdale, Miss	onstration farm. Graduate Alabama Agricultural College, B. S. Has had practical farm experience.	1 7
William M. Boggan, Columbia, Miss.	Graduate Mississippi Agricultural and Mechanical Col- lege, B. S. Prior to present appointment was principal of an agricultural high school and managed high-school	2 4½
Oscar C. Bottoms, Philadelphia, Miss.	demonstration farm. Graduate Alabama Polytechnic Institute, specializing in animal husbandry. Has had practical experience as manager of a dairy farm.	1 $5\frac{1}{2}$
Ridley W. Cannon, Decatur, Miss.	Graduate Burritt College (Tennessee), B. S. and H. M.; was also student at the University of Mississippi during 3 summers. For 7 years prior to present appointment served as principal of an agricultural high school.	61/2
Harry G. Carpenter, Rolling Fork, Miss.	Graduate Mississippi Agricultural and Mechanical College, B. S. At the time of his appointment as county agent was managing a 60-cow dairy farm.	4 4
Horace A. Carpenter, Belzoni, Miss.	Graduate Mississippi Agricultural and Mechanical Col- lege, B. S. Prior to present appointment taught in an agricultural high school and managed the school demon-	2 7
John W. Carpenter, jr., Green- ville, Miss.	stration farm.  Graduate Mississippi Agricultural and Mechanical College, B. S. Was instructor in agricultural engineering for the extension division of the Mississippi Agricultural and Mechanical College for 3 years prior to present appointment.	9½
Thomas I. Cook, Prentiss, Miss	Graduate Mississippi Agricultural and Mechanical Col-	2 4
Fred L. Craft, Noxapater, Miss	lege, B. S.: took post-graduate course in dairying. Graduate Mississippi Agricultural and Mechanical College, B. S. For a year prior to present appointment was employed by the Bureau of Plant Industry, U. S. Department of Agriculture, as special agent in the eradication of citrus canker in Florida.	6
George C. Cypress, Braxton, Miss.	Had 2 years' special instruction in agriculture at Tuskegee Institute, Alabama; also had practical farm experience.	1 9½
Van V. Eason, Louisville, Miss	Graduate Mississippi Agricultural and Mechanical College, B. S. Has had experience as manager of a dairy farm.	2 2½
Henry G. Grantham, Mize, Miss	Graduate Mississippi Agricultural and Mechanical College.	1 4
Newton D. Guerry, jr., Okolona, Miss.	Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment was special agent of the Bureau of Entomology. Had practical farm experience.	1 4

Name and home address.	Character of work. (See also general statement.)	Length o
Arthur G. Hamilton, Calhoun City, Miss.	Graduate Mississippi Agricultural and Mechanical College. Prior to present appointment was agriculturist in	Yrs. Mos
Harvey C. Heath, Holly Springs,	an agricultural high school. Has had practical farm experience. Graduate Alabama Polytechnic Institute, B. S. A. Has	3 4
Miss. Joel D. Howerton, Natchez, Miss	had practical farm experience. Graduate Mississippi Agricultural and Mechanical College.	1 7
Cecil A. Hughes, Macon, Miss	Taught in agricultural school.  Graduate College of Agriculture, University of Illinois.  Has had practical farm experience.	1 11
Frank Hurst, Forest, Miss	Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment taught in the agri- cultural high school and managed the school demonstra- tion farm.	1 1
Fred J. Hurst, Magnolia, Miss	Graduate Mississipp i Agricultural and Mechanical College, B. S. Has had practical farm experience.	1 7
Henry H. Leggett, Brookhaven, Miss.	Graduate Mississippi Agricultural and Mechanical College, B. S.; took post-graduate work at the Iowa Agricultural College. Has had practical farm experience; at the time of his appointment was manager of a farm.	0 8
Wesley R. Lominick, Gloster, Miss	Graduate Mississippi Agricultural and Mechanical College, B. S. and M. S.; attended a short course in plant pathol- ogy at the University of Florida. Was employed for 1½ years by the Bureau of Plant Industry as plant patholog-	1 7
Nate S. Martin, Ripley, Miss	ical inspector in connection with citrus-canker eradica- tion.  Graduate Mississippi Agricultural and Mechanical College,	0 7
Donald A. McCandliss, Gulfport,	B. S. Has had practical farm experience. Graduate Mississippi Agricultural and Mechanical College,	3 6
Miss. Jodie S. McKewen, Winona, Miss.	B. S. Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment had 2 years' ex- perience as teacher in agricultural high school and man-	1 5
Charles L. McNiel, Senatobia, Miss	ager of the high school demonstration farm. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had 10 years' practical experience in farming,	0 7
Enoch C. McReynolds, Kosciusko, Miss.	2 of them as manager of a 1,200-acre plantation. Graduate Mississippi Agricultural and Mechanical College, B. S. For 2 years prior to present appointment was teacher in an agricultural high school and manager of the	1 3
Maurice E. Miller, Charleston, Miss	school demonstration farm. Graduate Mississippi Agricultural and Mechanical College, B.S.;took post-graduate work in animal husbandry at the University of Wisconsin. Has had practical farm ex-	1 3
Will C. Mims, New Albany, Miss	perience. Graduate Mississippi Agricultural and Mechanical College, B. S. Was instructor in agriculture in an agricultural high school for 1 year. Has had practical farm experience.	4 2
William M. Mingee, Lucedale, Miss.	Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical farm experience.	2 5
George T. Neill, Raymond, Miss	Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment was teacher in agri- cultural high school and manager of the high school farm.	0 6
James W. Newton, Mayersville, Miss. James R. O'Neal, Greenwood,	Graduate Mississippi Agricultural and Mechanical College, B. S. Has had experience as a practical farmer. Graduate Mississippi Agricultural and Mechanical College,	1 1
Miss.	B. S. Prior to present appointment managed a large plantation.	0 7
James C. Reddoch, Quitman, Miss. Charles S. Rich, Monticello, Miss	Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical experience in farm work. Took a 4-year course in agriculture at the Mississippi Agri-	0 7
Robert C. Riggan, Iuka, Miss	cultural and Mechanical College. Has had excellent ex- perience as a practical farmer. Graduate Mississippi Agricultural and Mechanical College,	0 7
	B. S. For 2 years prior to present appointment was teacher in agriculture in an agricultural high school and manager of the high-school farm.	
John N. Robbins, Fulton, Miss	Graduate Mississippi Agricultural and Mechanical College, B. S. For 4 years prior to present appointment was in- structor in agriculture in an agricultural high school and manager of the high-school farm.	0 7
Julian E. Sides, Agricultural College, Miss. Frank M. Smith, Mendenhall,	Graduate Mississippi Agricultural and Mechanical College. Has had practical farm experience.	4 2
Frank M. Smith, Mendenhall, Miss.	Graduate Mississippi Agricultural and Mechanical College, B. S.; took 2 years' post-graduate work at this institu- tion. For 44 years prior to present appointment was teacher in agriculture and manager of the demonstration	1 5
Albert G. Spinks, Coffeeville, Miss.	Graduate Mississippi Agricultural and Mechanical College,	2 2
Claude G. Steele, Marks, Miss	B. S. Has had practical farm experience. Graduate Mississippi Agricultural and Mechanical College, B. S.; took 1 year's post-graduate work in horticulture in this institution.	2 3

Name and home address.	Character of work. (See also general statement.)	Length of service.
		Yrs. Mos.
Junie M. Thomason, Batesville, Miss.	Graduate Alabama Polytechnic Institute, B. S. A. Has had practical farm experience and was for 1 year teacher in original training and the second sec	1 3
John E. Vaughn, Tylertown, Miss.	in agriculture in an agricultural high school.  Graduate Mississippi Agricultural and Mechanical College,  B. S. For 2 years prior to present appointment was teacher in agricultural high school and manager of high-	0 9
Samuel M. Yeates, Moorhead, Miss.	school farm.  Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical farm experience. Prior to	5_3
Cleveland C. Bearden, Beaufort, N. C.	present appointment was a teacher in agriculture in an agricultural high school.  Graduate Mississippi Agricultural and Mechanical Col-	0 9
	lege, B. S.; also graduate student in plant pathology and citrus culture, University of Florida. Prior to present appointment was farm superintendent; taught agriculture in high school 1 year; and was agent for State plant food board of Florida, working on plant diseases and in-	
John Deal, Hayesville, N. C	sect diseases.  Took a 1-year special course in agriculture at the North Carolina Agricultural and Mechanical College. Has had	0 43
Willard T. Kyzer, Kinston, N. C	practical farm experience. Graduate South Carolina Agricultural College, B.S. Has	0 61
Warren M. Laughinghouse, Columbia, N. C.	had practical farm experience.  Took a 2-year course in agriculture at the North Carolina Agricultural and Mechanical College. Has had prac- tical farming experience, including management of a	0 9
Robert R. McIver, Sanford, N. C	large farm for 4 years. Pursued course in agriculture at the North Carolina Agri- cultural and Mechanical College 2½ years. Has had prac- tical farm experience.	2 4
Ewing S. Millsaps, jr., Dobson, N. C.	Graduate North Carolina Agricultural and Mechanical College, B. S. Managed farm 2 years before entering college.	1 0
William B. Pace, Shallotte, N. C	Graduate Mississippi Agricultural and Mechanical College. Has had practical farm experience; also worked on college farm. For 2 years after graduation taught agricul-	1 1
Carl C. Proffitt, Rutherfordton, N.C.	ture in high school.  Graduate of agriculture, North Carolin Agricultural and Mechanical College. Had 1 year's experience as teacher of agriculture in high school, in which position he had	1 11
Eugene R. Raney, Windsor, N.C.	full charge and management of a 50-acre farm. Graduate Mississipppi Agricultural and Mechanical College; took 1 year's post-graduate work at same institution. Worked on farm during vacations. Was employed by Department of Agriculture 1 summer in silo	1
John H. Speas, Danbury, N.C	construction work in Mississippi. Graduate in agriculture, North Carolina Agricultural and Mechanical College. Managed father's farm prior to	0 7
Needham B. Stevens, Plymouth, N. C.	present appointment. Graduate North Carolina Agricultural and Mchanical College, B. S.; took post-graduate course in the same institution, specializing in animal husbandry and agronomy. Engaged in farming 1 year. During 1 summer was employed as herdsman for the North Carolina Agricultural	3 6
Molloy C. Vaughn, Newbern, N. C.	and Mechanical College.  Graduate Mississippi Agricultural and Mechanical College,  B.S. Was employed as agent for the Bureau of Plant Industry and inspector for the State plant board of	0 4
Marion R. Bryant, Purcell, Okla	Florida for 2 years prior to present appointment. Graduate Oklahoma Agricultural and Mechanical College,	0 9
Frank H. Dillenback, Guthrie, Okla. (313 Federal Building).	B. S. in agriculture. Has had practical farm experience. Graduate Kansas Agricultural College, B. S	0 11½
William J. Green, Stillwater, Okla.	Graduate Oklahoma Agricultural and Mechanical College, B. S. in agriculture. Has had practical farm experience. Devotes entire time to boys' club work.	1 10
Otto J. Moyer, Stillwater, Okla	Graduate Oklahoma Agricultural and Mechanical College, B. S. in agriculture. Devotes practically his entire time to boys' club work.	0 9½
Arthur R. Smith, Muskogee, Okla. (11 Federal Building).	Graduate Oklahoma Agricultural and Mechanical College, B. S. Has had practical experience as a dairy farmer. After graduation spent some time in Wisconsin and other Northern States studying live stock and other	0 10½
Carroll S. Adams, Beaufort, S. C.	agricultural problems. Graduate New Hampshire College of Agriculture and Mechanic Arts, B. S.; special student University of Kentucky; student assistant in horticulture, University of Kentucky. Prior to present appointment was assistant professor of horticulture, University of Kentucky; assistant horticulturist, Kentucky Experiment Station; and had 2 years' practical experience in commercial market gardening.	0 6

Name and home address.	Character of work. (See also general statement.)	Length	
		Sel VIC	٠.
Charles W. Baker, Kingstree, S.C	Graduate Clemson Agricultural College; also received M. A. degree from Wisconsin Agricultural College. Worked on farm during vacations while attending college and	Yrs. M	fos. 4
Samuel E. Evans, Bennettsville, S. C.	had other farm experience.  Graduate Clemson Agricultural College; received master's degree from University of Wisconsin. Taught agricul- ture in an agricultural school. Managed an experimen- tal farm in connection with agricultural high school and had other practical farm experience.	3	8
Charner S. Patrick, Anderson, S. C.	Graduate Clemson Agricultural College. After graduation taught agriculture in an agricultural school. Has had practical farm experience.	3	11
James A. Riley, Chester, S. C	Graduate Clemson Agricultural College; also received M. A. degree from Agricultural College of Wisconsin. Has practical farm experience.	4	10
Francis W. Risher, Walterboro, S. C.	Graduate Clemson Agricultural College. Worked 1 year in office of the director of experiment station. Taught agriculture in agricultural school. Has practical farm experience.	2	1
Z. Dougla: Robertson, Estill, S. C	Studied agriculture 2 years at University of Virginia; also received master's degree at college of agriculture, University of Wisconsin. After graduation taught agriculture in high schools and operated a farm. Organized a large number of local communities for better agriculture.	0	812
William E. Stokes, Edgefield, S. C. (box 135).	Graduate Clemson Agricultural College. Was assistant professor of agronomy, New Hampshire Agricultural College, for 2 years. Has had practical farm experience.	0	91/2
William G. Adsmond, Crossville, Tenn. John H. Agnew, Alamo, Tenn	Attended University of Tennessee; has had practical farm experience. Graduate in agriculture, University of Tennessee. Has	0	9½ 10
Woodson S. Baldwin, Clarksville, Tenn.	practical farm experience. Graduate University of Tennessee, B. S. in agriculture.	2	9
Archie V. Bears, Fayetteville, Tenn.	Has had practical farm experience. Graduate Mississippi Agricultural and Mechanical College, B. S. Experienced in farming operations.	$2\frac{1}{2}$	0
Frank R. Bradford, Dandridge, Tenn.	Graduate Laneview College (Tennessee), and studied agriculture 3 years in the University of Tennessee. Has	0	101
Marvin D. Brock, Memphis, Tenn. (courthouse).	been a practical farmer all his life. Graduate University of Tennessee, B. S. in agriculture. During last year at the university was assistant in the department of agronomy. Spent all his life on the farm and managed from for both 6 west.	1	9
John E. Dail, Blountsville, Tenn	and managed farm for about 6 years.  Graduate University of Tennessee, B. S. in agriculture. Is a practical farmer.	2	0
Benton McM. Elrod, Brownsville, Tenn.	Educated at Berea College; also received B. S. degree in agriculture from University of Tennessee. Is a practical farmer.	2	2
Charles C. Flanery, Winchester, Tenn.	Studied agriculture 2 years at Berea College; also 4 years in agriculture at University of Tennessee, receiving B. S. from latter institution. Has had practical farm experience.	0	11
Jay C. Grimes, Madisonville, Tenn.	Graduate University of Tennessee, degree in agriculture. Has been practical farmer all his life.	1 :	
Peter C. Hambaugh, Newport, Tenn. Leonard J. Kerr, Selmer, Tenn	Graduate in agriculture, University of Tennessee. Has had practical experience in farm work. Studied agriculture 3 years at University of Tennessee.	0 :	2 11
Frank R. Hines, Rutledge, Tenn	Has worked on farm since leaving school and gained a practical knowledge of farming.  Graduate University of Tennessee, B. S. in agriculture.  For a short time was nursery inspector for the university.	3 1	10
Joe W. Lovell, Centerville, Tenn	Has had practical farm experience. Graduate University of Tennessee, B. S. A. Is experienced in general farm work. Taught school 2 years. Assisted in demonstration work prior to present appoint-	0 1	10
Hugh A. Powers, Lexington, Tenn.	ment. Graduate University of Tennessee. Taught agriculture in county high schools. Has been a practical farmer all	2	5
Elzie S. Roberds, Ripley, Tenn	his life.  Graduate Mississippi Agricultural and Mechanical College. Taught at that institution after graduation and later was director of the agricultural department of an agricultural difference of the second control o	4	3
James L. Robinson, Jacksboro, Tenn.	agricultural high school.  Graduate in agriculture, University of Tennessee. Taught school. Has practical knowledge of general farm work.	2 1	10
Thomas L. Robinson, Murfreesboro, Tenn.	Graduate University of Tennessee, B. S. in agriculture. He worked on a stock farm until he entered university. Prior to present appointment served as official tester of cows for advanced registry 2 years; was dairy demon- strator on an agricultural train 1 summer; also taught	1	0
Walter O. Sharp, Sevierville, Tenn.	agriculture in high schools.  Graduate University of Tennessee, B. S. in agriculture; also attended summer courses at university. Taught for a time. Practical farm experience.	0 1	11

Name and home address.	Character of work. (See also general statement.)	Length of service.
		Van Man
Oakley M. Shelby, Dover, Tenn	Graduate University of Tennessee, B. S. A. Was employed as field assistant in tobacco-insects investigation 3 summers. Is familiar with the production of general	Yrs. Mos.
Everett R. B. Shockley, Nashville, Tenn. (care of A. & I. College).	farm crops and the raising of live stock.  Graduate Agricultural and Industrial State Normal School, Nashville, Tenn. Worked as farm superintend-	0 8
Henry H. Thomas, Greenville, Tenn.	ent at this institution.  Graduate East Tennessee Normal School. Taught agriculture in county high schools. Has had practical experience in the management of live stock and general farm	1 1
Felix G. Vickers, Tazewell, Tenn.	operations. Pursued agricultural course at University of Tennessee 2 years and attended summer sessions 5 years. Taught	1 2
Wilford F. Weir, Clinton, Tenn	in rural schools 4 years. Had practical farm experience. Graduate in Agriculture, University of Tennessee. Taught school 4 years. Previous to present appointment had	1 2
Andrew J. Winegar, Knoxville, Tenn. (courthouse).	several years' practical experience in farming. Graduate Carson-Newman College, B. A.; also graduate University of Tennessee, B. S. A. Has practical knowledge of farm work.	2 0
Elbert B. Wright, Lewisburg, Tenn. Keatley G. Baker, Kerrville, Tex	Attended college of agriculture, University of Tennessee, 3 years. Has had practical farm experience.  Graduate Kansas State Agricultural College, B. S.	0 11
Tex. Groesbeck,	ment was employed by the Forest Service.	2 5 6
James B. Snider, Rusk, Tex	Graduate Texas Agricultural and Mechanical College, B. S. Has had special training in horticulture and farm garden- ing.	$0   6\frac{1}{2}$
Clive Templeton, Longview, Tex Bernard O. Bradshaw, Covington, Va.	Graduate Texas Agricultural and Mechanical College, B. S. Graduate Ontario Agricultural College, Guelph, Canada; also did special work at Virginia Polytechnic Institute. Has had much active experience in farm work.	2 6 4 8
Shirley L. Cole, Stafford, Va	Student in special courses in agriculture, Virginia Polytechnic Institute. Had charge of the greenhouse at the college 2 years. Prior to present appointment was engaged for 4 years in private orchard work and general	3 5
Gordon A. Elcan, Sheppards, Va	farm work. Graduate Hogue Academy, Blackstone, Va. Has had practical farm experience.	0 6
Kenny N. Ellis, Waverly, Va	Took 2 years' course in agriculture at Virginia Polytechnic Institute. Has had practical farm experience.	3 6
Weldon H. George, Runnymede, Va.	Has an agricultural certificate from the Hampton Institute, where he did considerable work in connection with farm machinery, creameries, and incubators. Is familiar with general farming problems.	1 82
Robert F. Jones, North Emporia, Va.	Took a 5-year' course at Virginia Normal and Industrial Institute, Petersburg, Va. Has practical knowledge of farming.	3 4
Wilbur K. Moffett, South Boston, Va. Farrar V. Shelton, Charlotte Court	Graduate Pennsylvania State College, B. S. in agriculture. Has had valuable experience in general and dairy farming.	0 6
House, Va. Jollie H. Tibbs, Fincastle, Va	Graduate Virginia Polytechnic Institute, B. S., in agricul- ture. Has had farming experience. Graduate Michigan Agricultural College, B. S. in agricul-	0 9
R. E. F. Washington, Roxbury,	ture. Was 4 years principal of a large agricultural high school. Has had practical farm experience. Graduate Hampton Institute. Has been a successful	6 0
Va. (box 51, R. D. 1). Robert L. Buchanan, Parkers- burg, W. Va.	farmer.  Graduate University of West Virginia and Michigan Agricultural College. Engaged in forage crop investigations, Washington State Experiment Station, 1 year. Experiment of the control form work.	2 11
William D. Click, Hamlin, W. Va.	rienced in practical farm work.  Graduate in agriculture, Berea College. Familiar with general farming operations. Prior to present appointment was employed 4 months in farm management investigations by the United States Department of Agriculture.	3 6
H. R. Cokeley, Moorefield, W. Va.	Graduate West Virginia University, B. S. in agriculture. Taught school 4 years. Had practical experience in	1 1
Benjamin F. Creech, Spencer, W. Va.	Is college graduate, taking degree of B. S. Engaged in active farm work 6 years. Prior to present appointment spent 3 summers in field work for the Office of Farm Management, U. S. Department of Agriculture.	0 10
Frank M. Foote, Beckley, W. Va.	tical agriculture. Has nad extensive experience in prac-	3 11½
Arthur F. Hedges, Glenville, W. Va.	Graduate in agriculture, University of Wisconsin; 1 year post-graduate work. Was head of department of agriculture, Northland College, and managed farm in connection with that institution; also had other practical	0 11
Samuel F. Hinkle, Webster Springs, W. Va.	farm experience. Graduate Ohio State University, B. S. in agriculture. Prior to present appointment had 2 years' experience on	1 1

Name and home address.	Character of work. (See also general statement.)	Length o service.
Burt Johnson, Marlinton, W. Va	Had 2 years' work in agriculture at Berea College; also took	Yrs. Mos
H. W. Prettyman, Keyser, W. Va.	2 years' course in agriculture at University of Wisconsin. Is thoroughly familiar with farming operations. Graduate West Virginia University, B. S. in agriculture. Served as assistant county agent before entering upon	1 2
Harley D. Rohr, Grafton, W. Va	present duties. Has had farm experience. Graduate college of agriculture, University of West Virginia. Had experience as teacher in rural schools and	1 2
James E. Romine, Buckhannon,	taught agriculture in the high school 3 years. Engaged in farm work. Graduate University of West Virginia, B. S. in agriculture.	1 11
W. Va. Webster H. Sill, Bethany, W. Va.	Has practical knowledge of farming. Graduate Pennsylvania State College, B. S. A. Familiar with all kinds of farm operations. Was school teacher 1 year. Prior to present appointment was employed for short periods by the Bureau of Entomology and the Office of Farm Management, U. S. Department of	4 11
Olive H. Stanard, Clay, W. Va	Agriculture. College graduate, B. S. in agriculture. Prior to present	1 5
Carl J. Williams, Sacramento, Cal.	appointment owned and operated a small farm. Graduate college of agriculture, University of California. Prior to present appointment was assistant to farm advis-	1 4
L. A. Bevans, Danbury, Conn	ors of California 2 years.  Attended Massachusetts Institute of Technology 1 term; graduate Massachusetts Agricultural College, B. S. Was	0 9
E. A. Brown, Hartford, Conn	teacher of agriculture in high schools 2 terms.  Graduate Cornell University, B. S. Taught agriculture in high school 1½ years.	3 4
Harry G. Avery, Shoshone, Idaho.	Attended Kansas Agricultural College 3 terms. For 3 years managed 700-acre farm in Kansas and for 1 year teacher of agriculture in high school.	1 2
Herbert H. Beier, Coeur d'Alene, Idaho.	Graduate college of agriculture, University of Idaho, B. S. Prior to present appointment, was employed for various periods in Forest Service; also as buttermaker for Caldwell Cooperative Creamery, Caldwell, Idaho, and in charge of Boise Valley Cow-Testing Association, Boise,	1 3
R. R. Lancaster, Rupert, Idaho	Idaho. Attended University of Missouri 1 term and Kansas Agri-	1 1
	cultural College 2 terms. Prior to present appointment served in U. S. Army 6 years, and for short periods during summer on farms of University of Missouri, and Kansas	
John E. White, St. Anthony, Idaho.	Agricultural College and Experiment Station. Graduate Utah Agriculture College, B. S. Was teacher of agriculture in high school 4 years.	0 8
G. L. Reed, Brookville, Ind E. L. Shoemaker, Versailles, Ind R. E. Wilson, Peru, Ind H. E. Ackerson, Monticello, Ind	Graduate Purdue University, B. S. Graduate Purdue University; taught agriculture 2 years. Graduate Purdue University, B. S. in agriculture	0 8 0 7 0 8
B. B. Adams, Rockville, Ind	dodododododododo.	0 10 0 10
Ralph E. Arnett, Danville, Ind	lege, 1 term.  Graduate Iowa College of Agriculture, M. S. Was assistant in animal husbandry department of that institution.  Managed farm 2 years.	1 0
Ross N. Atkinson, Evansville, Ind. Donald D. Ball, Washington, Ind Paul R. Bausman, Monticello, Ind.	Managed farm 2 years. Graduate Purdue University, B. S. in agriculture	0 9 0 9 0 6
H. S. Benson, Sullivan, Ind	inspector, State chemist department, Purdue University, 2 years. Graduate Purdue University, B. S. A. Subsequently was	0 8
P. D. Brown, Greensburg, Ind	supervisor of vocational agriculture in Owensville, Ind., schools. Graduate Kentucky University, college of agriculture, B. S.	1 5
Chas. A. Buechner, Knox, Ind	Graduate Kentucky University, college of agriculture, B.S. Graduate Purdue University, B.S. A. Prior to present appointment was manager Fame Canning Co., Tipton, Ind.	0 10
L. M. Butler, Vincennes, Ind	Graduate Purdue University, B. S. A. Agricultural instructor, high school, 1 term, and instructor in animal husbandry and dairying at Winona College of Agricultural agreements.	0 10
V. V. Clarke, Plymouth, Ind	ture, 2 years.  Graduate Purdue University, B. S. Has managed farm 1 year.	9
Howard J. Clinebell, Terre Haute, Ind.	Graduate University of Illinois, B. S. Was crop investigator, Purdue University extension department, 1 summer prior to present appointment.	9
Myron E. Cromer, Frankfort, Ind.	Graduate Purue University, B. S. A. Teacher of agriculture in high schools 3 years.	7
T. C. Cravens, Martinsville, Ind H. W. Crowe, Brazil, Ind Saml. S. Davis, Kentland, Ind	Graduate University of Illinois. B. S. A. Graduate Purdue University, B. S. A. Graduate University of Illinois, B. S. and M. S. Managed	10 10
G. A. Ellis, Franklin, Ind	a farm 2 years.  Graduate Iowa College of Agriculture, B. S. in animal husbandry. Teacher in agricultural schools 2 years.	10
F. S. Fouts, Greencastle, Ind		9

Name and home address.	Character of work. (See also general statement.)	Length of service.
		Yrs. Mos.
Whitney K. Gast, Logansport, Ind.	Graduate Purdue University, B. S. Has managed farm 1 year.	9
R. M. Gilbert, Indianapolis, Ind	Graduate Purdue University, B. S. Taught agriculture in Minnesota schools 1 year. Has managed farm 5 years.	2 10
A. L. Hodgson, Winchester, Ind	Attended Texas Agricultural and Mechanical College 2 years; graduate University of Wisconsin, B. S. A. Worked on father's farm; taught rural school 2 years. Graduate Indiana University, A. B. and B. S.; also attended Purdue University school of agriculture 1 term. Graduate Pennsylvanie State College B. S. A. Was as	11
C. M. Job, Columbus, Ind	Worked on lather's larm; taught rural school 2 years. Graduate Indiana University, A. B. and B. S.; also at-	10
A. T. Morrison, Connersville, Ind.	Graduate Tempsylvania State Conege, D. S. A. Was as-	1 2
Geo. X. Reed, Boonville, Ind	sistant instructor. University of Illinois, 1 term.	1 9
	Graduate Cornell College, Mount Vernon, Iowa., B. S.; also Iowa State College, B. S. Was principal Delmar Junction High School I year; farm management enumerator and demonstrator I summer.	
G. W. Rosencrans, Covington, Ind.	ator and demonstrator I summer.  Graduate Miami University; received M. S. degree from University of Wisconsin. Taught school 1 year.  Graduate Purdue University R. S. and M. S. For 2 years.	2 0
Harold R. Smalley, Angola, Ind	was assistant in soil and crops department, Purdue Uni-	5 0
E. L. Shoemaker, Versailles, Ind.	versity experiment station. Graduate Purdue University, B.S. Teacher of agricul-	
Charles A. Burge, Greenfield, Iowa	ture 2 years. Graduate Iowa State College, B. S. in animal husbandry;	10
Fred F. Clark, Wyoming, Iowa	attended University of California farm school 1 year. Graduate Iowa State College, B. S. A. Prior to present appointment was assistant in agricultural extension at	1 8
Clyde H. Combs, Fayette, Iowa	this institution. Graduate Iowa State College B. S. in animal husbandry	10 d 1 5 d
George Dunlop, Orange City, Iowa.	Graduate Iowa State College, B. S. A. Engaged in extension work in farm crops at that institution prior to present appointment.	1 5
Bert L. France, Emmetsburg, Iowa.	Graduate Iowa State College, B. S. Engaged in farming 4 years.	3 6
E. F. Graff, Iowa City, Iowa Glenn Hazen, Mt. Pleasant, Iowa Henry P. Kelley, Griswold, Iowa	Graduate Iowa State College. Graduate Iowa State College, B. S. in animal husbandry. Graduate University of Illinois, B. S. Engaged in farm-	1 0 102 73
Carl N. Kennedy, Des Moines, Iowa.	ing 2 years.  Graduate Iowa State College, B. S. in animal husbandry.  Instructor in animal husbandry, Texas Agricultural and Mechanical College, 2 years; assistant professor in	1 4
A. H. Pickford, Wapello, Iowa	animal husbandry, Oregon Agricultural College. Graduate Iowa State College of Agriculture. Managed father's farm 1 year. For 2 years prior to present ap- pointment was instructor in agriculture and engaged	10
W. O. Roessler, Sigourney, Iowa	in extension work.  Graduate University of Illinois, B. S. Agricultural instructor in high school 1 year.	10
C. C. Scott, Rockwell, Iowa	Graduate Iowa State College, B. S. Engaged in teaching	5
Lew P. Sewell, Bedford, Iowa	and farming 2 years. Graduate Iowa State College, B. S. Agricultural in-	42
J. P. Stack, Creston, Iowa	structor 3 years. Graduate Kansas Agricultural College, B. S. Engaged in soil-survey work 1 season; instructor, farm crops,	5 1
T. D. (Discuss) Tr	in soil-survey work I season; instructor, farm crops, Kansas Agricultural College, I term; agriculturist, Great Western Sugar Co., I year. Graduate Iowa State College, B. S. in dairying. Prior to	
J. F. Thomas, Hampton, Iowa	of Maine and assistant in dairy extension work at Iowa	5½
E. M. Torblaa, Clarion, Iowa	State College. Graduate Iowa State College, B. S. in animal husbandry	1 51 5
Theo. Thorson, Tripoli, Iowa	Graduate Iowa State College of Agriculture, B. S. Was instructor of dairying, University of Nebraska.	54
Harley Walker, Burlington, Iowa.	Graduate Iowa State College, B. S. Was instructor in agricultural school and engaged in farming prior to present appointment.	1 10
D. H. Zentmire, Marengo, Iowa	Graduate Iowa State College, B. S. A. Taught agricul- ture at Iowa State College 2 years. Subsequently was assistant secretary, Iowa Corn and Small Grain Growers'	312
Geo. W. Kable, Corvallis, Oreg	Association.  Attended University of Washington 4 years, University of California 1½ years, and University of Nebraska 1 year; received B. S. degree from University of California. Was assistant irrigation engineer, State College	10
Orville B. Burtis, Solomon, Kans.	of New Mexico, 2 years and managed a ranch 1 year. Graduate Kansas State College of Agriculture, B. S. Has	2 5
Alfred L. Clapp, Council Grove, Kans.	had practical experience as farm manager. Graduate Kansas State Agricultural College, specializing in agronomy. Was foreman agronomy farm at this in- stitution 1 year, managed ranch in Colorado 1 year, and	
	was mgn-school instructor i year.	
A. D. Folker, Topeka, Kans	Graduaté Iowa Agricultural College, B. S. Managed 400- acre farm, and has been active in farmers' institutes and other farm organizations.	4 0

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Name and home address.	Character of work. (See also general statement.)	Length of service.
		Yrs. Mos.
Preston O. Hale, Cottonwood Falls, Kans.	Graduate Kansas Agricultural College. Assisted in feed- ing experiments at the college. Managed large stock farms I year.	1 5
John V. Hepler, Dodge City, Kans.	Graduate Kansas State Agricultural College, B. S. Taught	0 10
H. L. Hildwein, Kingman, Kans.	agriculture I year.  Graduate Kansas State Agricultural College, B. S. Engaged in general form work 2 years.	0 10
A. E. Jones, Mankato, Kans	gaged in general farm work 2 years.  Graduate Kansas State Agricultural College, B. S. Was agricultural instructor in high school 1 year. Managed home farm.	1 0
Ralph Kenney, Manhattan, Kans.	Graduate Ohio State College, B. S. Subsequently was assistant in agronomy, Kent State College and Experiment Station; also assistant professor, farm corps, Kansas	0 6
Edward Larsen, Pratt, Kans	State Agricultural College.  Graduate Kansas State Agricultural College, B. S. After graduation engaged in farming and breeding pure-bred	0 6
George W. Sidwell, Leoti, Kans	Hereford cattle. Graduate Kansas State Agricultural College, B. S. After	0 6
A. G. Van Horn, Kansas City, Kans.	graduation taught school and engaged in farming.  Graduate Kansas State Agricultural College, B. S. Managed a dairy farm after leaving college.	0 8
H. J. Adams, McPherson, Kans	Graduate Kansas State Agricultural College, B. S., specializing in animal husbandry.	0 101/3
Joseph H. Bodwell, Foxcroft, Me. Richard B. Dodge, Orono, Me	Graduate University of Maine, college of agriculture, B. S. Graduate University of Maine, college of agriculture	1 1
Norman S. Donahue, Belfast, Me.	Graduate University of Maine college of agriculture, B. S. Was principal and teacher of agriculture in Hartland Academy, Hartland, Me., for 1 term.	0 9½
Roger L. Gowell, Warren, Me John L. Scribner, Presque Isle Me.	Graduate University of Maine college of agriculture, B. S. Graduate University of Maine college of agriculture	1 10 1 1
Robert M. Stiles, Hartland, Me	Attended University of Maine college of agriculture 2 terms. Managed farm 4 years.	1 10
Ralph H. Gaskill, Danvers, Mass	Graduate Massachusetts Agricultural College, B.S. After graduation was instructor in agricultural school.	0 11
H. L. Barnum, Lake City, Mich.	Graduate Michigan Agricultural College, B. S. Managed farm.	1 4
Elton B. Hill, Menominee, Mich	Graduate Michigan Agricultural College, B. S. Was in-	2 0
Carl M. Kidman, Onaway, Mich	Graduate Michigan Agricultural College, B. S. Prior to present appointment engaged in farm work 1 year; taught school 3 years, and engaged in farm-management	1 2
Emil L. Kunze, Sault Ste. Marie, Mich.	survey field work. Graduate Michigan Agricultural College. Taught agriculture and chemistry 2 terms at high and normal schools; also assisted in farm crops department, Mich-	1 0
Arnold L. Olson, Munising, Mich.	igan Agricultural College. Graduate Michigan Agricultural College, B. S. Teacher	0 8
B. P. Pattison, Escanaba, Mich	of agriculture in high school 1 year.  Attended Michigan Agricultural College 4 years. For 1 year was professor of animal husbandry at University of	1 1
C. L. Rose, Evart, Mich	West Virginia. Engaged in farm work 1 year. Graduate Michigan Agricultural College, B. S. Managed	0 8
F. L. French, St. Paul, Minn	farm 6 years.  Graduate Iowa State College, B. S. Director of agriculture high school 1 term.	0 7
Frank L. Gerten, St. Paul, Minn	Attended college of agriculture, University of Minnesota, 4 years. Taught agriculture in high school 2 years; also engaged in active farming.	1 1
A. W. Malcolmson, Olivia, Minn	Graduate college of agriculture, University of Minnesota; graduate student and instructor in animal husbandry at this institution 1 year.	0 9
A. C. O'Banion, Moorhead, Minn.	Graduate Iowa State College of Agriculture, specializing in animal husbandry and agronomy. Was high-school in-	1 4
Robert R. Smith, St. Paul, Minn. Alvin I. Foard, Farmington, Mo	structor in agriculture 2 years. Graduate college of agriculture, University of Minnesota Graduate Missouri College of Agriculture, B. S. Engaged in farm-management survey work 1 summer. Was in-	1 1 1 5
E. M. Harman, Columbia, Mo	structor in agriculture in normal school 1 year. Graduate University of Missouri. B. S. Was official tester for dairy department. University of Illinois. 1 year.	0 4
W. C. Swarner, Tipton, Mo John R. Hall, Harrisonville, Mo	Graduate University of Missouri, B. S. Graduate Missouri College of Agriculture, B. S. Engaged	0 5 0 6
Glenn S. Hensley, Farmington,	in farming since graduation.  Graduate Missouri College of Agriculture, B. S.; was student assistant in farm crops.	0 10
W. R. Gordon, Townsend, Mont.	Graduate West Virginia University, B. S. Teacher of agriculture in high school 1 term.	0 101
D. W. Mendenhall, Glendive, Mont.	Graduate North Dakota Agricultural College, B. S. Taught agriculture in high school and agricultural school 2 years after graduation.	1 3
James E. Hogue, Lincoln, Nebr	Graduate University of Nebraska, B. S. Has been connected with farming operations all his life.	0 7
George Newswanger, Omaha, Nebr.	Graduate University of Nebraska, B. S. Was in charge of animal-husbandry work at Scottsbluff substation, Mitchell, Nebr.	0 10

Name and home address.	Character of work. (See also general statement.)	Length of service.
P. C. Neuswanger, Omaha, Nebr	Graduate Colorado College, B. S.; also attended University of Nebraska 1 year.	Yrs. Mos.
Noel N. Rhodes, Omaha, Nebr  L. Boyd Rist, Lincoln, Nebr	Attended Nebraska School of Agriculture 3 years; also University of Nebraska college of agriculture 3 years. Graduate college of agriculture, University of Nebraska,	0 11 2 2
Fred L. Taylor, Lincoln, Nebr	B. S. Graduate college of agriculture, University of Nebraska, B. S. Was agricultural instructor in high school after	1 6
W. W. Sim, Lincoln, Nebr	graduation.  Graduate University of Notre Dame and University of California, B. A. and B. S. Managed and owned several	0 4
John J. Sjogram, Omaha, Nebr	farms. Graduate Nebraska College of Agriculture, B. S. Was agricultural instructor in high school 2 years after grad-	0 4
Joseph Willis Wilson, Mason, Nev.	uation. Graduate University of Nevada, B. S., in agriculture.	0 11
C. A. Smith, Manchester, N. H	Engaged in farming and stock raising after graduation. Graduate Michigan Agricultural College, B. S. Managed a farm 8 years, and for 1 year was assistant superinten- dent of farm of an agricultural school.	1 0
W. C. Stokoe, Lancaster, N. H	Graduate Cornell University. Engaged in practical farming, and taught agriculture nearly 3 years.	1 2
F. A. Carroll, Trenton, N. J	Graduate Rhode Island State College. Was supervisor Coos County (N. H.) Cooperative Cow-Testing Association 1 year; assistant in dairying cooperative work between U.S. Department of Agriculture and Delaware College 1 year, and engaged in farming 2 seasons.	1 2
L. A. Cooley, Toms River, N. J	Graduate Rutgers College, B. S. Spent 2 summers in farm work.	0 10
Walter M. Ellison, Silver City, N. Mex.	Attended Cornell Institute 4 years and New Mexico College of Agriculture 5 years. Was instructor in high schools 2 years.	11 11
James G. Hamilton, Los Lunas, N. Mex.	Graduate University of New Mexico, B. S. A. For 2 years was assistant in agronomy at New Mexico Agricultural College, his duties being those of superintendent of the college experiment farm and instructor in farm machin-	1 4
Richard L. Strong, Estancia, N. Mex.	ery. Graduate agricultural college, Fort Collins, Colo., B. S. Engaged in practical farming 3 years after graduation.	0 11
Homer P. Powers, Socorro, N. Mex	Graduate New Mexico College of Agriculture. Engaged in	1 0
Stuart Stirling, Carrizozo, N. Mex. Emmett M. Yates, Tucumcari,	farming 1 year prior to present appointment. Graduate New Mexico College of Agriculture, B.S. Graduate Missouri State University, B.S. Was high- school principal 3 years, working on farms in summers.	0 10 0 8
N. Mex. Errol Stanley Bird, Canton, N. Y	school principal 3 years, working on farms in summers. Graduate New York State College of Agriculture, Cornell University, B. S. For 2 years after graduation was farm adviser Rome State Custodial Asylum, and for 6 months	1 , 3
Oscar H. Chapin, Walton, N. Y	manager of 750-acre farm.  Attended Cornell University 7 terms. Has had practical	0 5
Arthur D. Davies, Herkimer, N. Y. Jasper F. Eastman, Binghamton, N. Y.	experience in dairy and general farming. Graduate Cornell University, B. S. Graduate Massachusetts Agricultural College, M. A.; also received degrees of B. A. and M. A. from University of Illinois. For 7 years was instructor in agronomy at State	0 11 2 5
Nicholas G. Farber, Troy, N. Y	school of agriculture, Morrisville, N. Y. Graduate Cornell University, B. S. Taught agriculture in	1 2
C. W. Gilbert, Catskill, N. Y	high school 2 years. Engaged in farm bureau Work. Graduate New York State College of Agriculture, Cornell	0 11
Hawley B. Rogers, Jamestown,	University, B. S. Graduate New York State College of Agriculture, B. S	4 4
Edwin P. Smith, Norwich, N. Y.	Graduate Rochester University; also received B. S. A. de- gree from Cornell. Assisted in extension work 1 winter, and managed a 400-acre farm prior to present appoint-	3 5
Ralph Q. Smith, Belmont, N. Y	ment.  Graduate Ohio State College, B. S. A. Taught school 2 terms; engaged in farming 1 summer, and assisted State agriculture extension department in several counties in	1 4
Chas. A. Taylor, Herkimer, N. Y.	Ohio. Attended Cornell agricultural college 1 year; 3 summers at Cornell summer school. Managed home farm 2½ years;	
J. R. Teall, Syracuse, N. Y	for 3 years taught agriculture. Graduate Cornell University, A. B. Managed farm while at college. Was manager Cayuga County farm bureau 3	4 3
E. V. Underwood, Oswego, N. Y	years. Graduate Cornell University, B. S. A. Taught agriculture	3 11
Theodore W. Vann, Elmira, N. Y	1 year; was also manager of Oswego farm bureau. Graduate New York College of Agriculture, B. S. Man- aged farm 6 months. Was assistant manager of farm bureau, Oswego County, 6 months prior to present	1 8
Edw. C. Weatherby, Auburn, N. Y.	appointment. Graduate Cornell University, B. S. Managed home farm of 250 acres.	1 5

Name and home address.	Character of work. (See also general statement.)	Lengt	
Elmer R. Zimmer, Oswego, N. Y	Took special course at Cornell University 2 years. Was instructor in animal husbandry department, college of agriculture, Cornell University, 3 terms; also manager	Yrs. A	
Arthur H. Neumann, Dickinson, N. Dak.	Tioga County farm bureau.  Graduate University of Wisconsin, B. S. A. For various periods was assistant in soils research, University of Wisconsin; analytical soil chemist, University of Wisconsin; and in charge of chemistry and agriculture at State school of science, Wahpeton, N. Dak.	0	3
Elmer E. Barnes, Paulding, Ohio.	Graduate Ohio State University, B. S. A. Engaged in farming and taught district school 3 years. Was assist- ant in agricultural chemistry and soils department, Ohio State University, for 1 semester.	0	5
Walter Eli McCoy, Springfield, Ohio.	Graduate Ohio State University, B. S. A. Was employed by extension department, Ohio State University, 1 year.	. 4	
William Watson Brownfield, Cambridge, Ohio.	Attended Ohio State University 3 years. Was farm manager 3 years.	1	7
F. S. De Lashmutt, Columbus, Ohio.	Attended Ohio State University 3 years. Engaged in dairy extension work and as instructor in dairy department, Ohio State University, 1 year.	0	11
Clayton L. Long, Cleveland, Ohio.	Attended Ohio State University 1 term. Was extension horticulturist and poultryman at this institution 1 term and instructor in horticulture and extension horticulturity. New Homeshire State College, 2 terms	1	0
Arthur R. Chase, The Dalles, Oreg.	ist, New Hampshire State College, 2 terms.  Attended Agricultural College of Iowa 1 term and Oregon Agricultural College 2 terms, receiving B. S. degree from the latter institution. Taught rural schools 3 terms and was county school supervisor 1 year; also worked on ranches 5 summers. Conducted corn contests for Oregon 2 years and potate contests 1 year, and organized rural	2	4
W. M. Brennan, Mitchell, S. Dak.	parent-teachers' circles and 1 grange.  Graduate Iowa State College, B. S. Spent all his life on farm and managed an 800-acre ranch for 3 years after	0	9
A. L. Bushy, Plankington, S. Dak.	graduation.  Attended South Dakota State College 4 years; also Purdue University, receiving degrees of B. S. and M. S. from latter institution. Was teacher, Purdue University 4	0	5
P. J. Crandall, Alexandria, S. Dak.	years. Graduate University of Wisconsin, B. S. Instructor in	0	5
J. H. Hamilton, Mitchell, S. Dak	agriculture 3 years. Attended Michigan Agricultural College 4 years. Teacher	0	6
George B. Kennard, Sioux Falls, S. Dak.	of agriculture 4 years.  Graduate South Dakota State College, B. S. A. After graduation taught agriculture in high school. Lived all his life on farm.	0	9
Dick Lewallen, Presho, S. Dak	Graduate Kansas State Agricultural College, B. S. A. For 2 years after graduation taught school and directed summer garden work.	2	11
Harry E. Rilling, Wessington Spring, S. Dak.	Graduate South Dakota State College of Agriculture. Was assistant in agronomy at the college 2 years. Spent 1 year in farming after graduation.	1	0
L. M. Caldwell, Hayti, S. Dak	Graduate South Dakota State College, B. S. Was agricul- tural instructor in high school 2 years, engaging in exten- sion work during summer months, and half time during school year.	0	7
E. C. Bird, Armour, S. Dak	Graduate Oberlin College, A. B.; also attended University of Wisconsin.	3	0
R. E. Johnston, Hot Springs, S. Dak.	Graduate South Dakota State College, B. S; for 2 summers was student assistant in agronomy. Worked 3 years on farm before attending college; after graduation managed a farm 3 years.	1	10
Geo. R. Mayland, Rapid City, S. Dak.	Graduate South Dakota State College, B. S., also receiving degree in agriculture. Managed a farm 3 years.	0	6
N. Risjord, Miller, S. Dak	Graduate North Dakota Agricultural College, B. S. Engaged in farming during summer months. After graduation taught agriculture; organized farmers' clubs, farm-	0	3
Colman Wagner, Selby, S. Dak	Graduate South Dakota State College, B. S. Has spent nearly all his vacations on farm and is familiar with farm	. 0	6
Lew Mar Price, Price, Utah Harrison B. Woodbury, Nephi, Utah.	life; has managed a farm since graduation.  Graduate Utah Agricultural College.  Graduate University of Utah; attended Utah Agricultural  College 1 term. Was engaged in farming 3 years, and	1 0	9
I. N. Bartlett, Middlebury, Vt	was employed as horticulture inspector 1 year.  Graduate University of Vermont and State Agricultural	0	9
Morton F. Downing, Rutland, Vt.	College, B. S. Graduate University of Vermont and State Agricultural College, B. S. Was instructor in agronomy and farm manager at an agricultural school for 3 years, and was	3	3
	employed by the University of Vermont extension service for 3 months.		

Name and home address.	Character of work. (See also general statement.)	Length of service.
Harold F. Johnson, Newport, Vt	Graduate University of Vermont and State Agricultural	Yrs. Mes.
	College, B. S. in agriculture. Served with Vermont agriculture extension service and dairy department of	
L. A. Wood, St. Johnsbury, Vt	University of Vermont 3 years.  Graduate Cornell College of Agriculture, B. S. Prior to present appointment was employed 3 months as assist-	2 9
R. B. Coglon, Pullman, Wash	ant in the office of farm management of this department. Graduate Toronto University. Subsequently was lecturer in agriculture at University of Saskatchewan 1 year; county agricultural agent, North Dakota Better Farm- ing Association, 1 year; State seed commissioner, Idaho Experiment Station, 2 years; assistant director of coun- ty agriculturists for Idaho 1 year; and county agricul-	2 4
	ing Association, 1 year; State seed commissioner, Idaho Experiment Station, 2 years; assistant director of county agriculturists for Idaho 1 year; and county agriculturist, Lane County, Oreg., 1 year.	
John W. Adriance, Stockton, Cal	Graduate college of agriculture, University of California, B. S. Spent life on farm.	91/2
Ernest L. Conant, Sacramento, Cal.	Attended university farm school, Davis, Cal., 1 year. Managed farm and ranch 2 years. Prior to present appointment was assistant to county horticultural commission, Santa Clara County.	7½
Edwin L. Garthwaite, Bakersfield, Cal.	Graduate college of agriculture, University of California, B. S.	8
William A. Kent, Modesto, Cal	Graduate University of California, B. S. Was laboratory assistant in department of soils at the college.	91/2
George W. Kretsinger, San Diego, Cal.	Graduate University of California, B. S. Had general farm experience covering several years.	91
Donald E. Martin, Berkeley, Cal W. A. McCutchan, Fresno, Cal Myron A. Rice, Berkeley, Cal	Graduate University of California, B. S. in agriculture Graduate college of agriculture, University of California Graduate college of agriculture, University of California,	$\begin{array}{cccc} 1 & 0 \\ & 9 \\ 1 & 2 \end{array}$
John E. Stiles, Berkeley, Cal	B. S	1 2
Frank G. Tiffany, Willows, Cal	Attended Stanford University 1 year; received degree of B. S. at college of agriculture, University of California. Owns and manages ranch.	9½
	Graduate college of agriculture, University of California, B. S. Spent 2 years on large ranch after graduation.	8
C. W. Hammans, Storm Lake, Iowa. L. T. Nutty, Marion City, Iowa	Graduate Iowa State College, B. S. in animal husbandry. Was superintendent of agricultural high school 3 years. Graduate Iowa State College of Agriculture, B. S. in animal	9 <del>1</del> 10 <del>1</del>
	husbandry. Raised on live-stock farm. Attended Fremont Normal 1	10
John L. Lantow, Paola, Kans	term. Prior to present appointment was supervisor of garden work, Blair, Nebr. Graduate Kansas State Agricultural College, B. S. Has	101/3
	had practical farm experience. Graduate University of Missouri, B. S. Wasinstructorin	2 6
E. H. Leker, St. Charles, Mo Edw. A. Livesay, Columbia, Mo	agriculture in Madison city schools 2 years. Graduate University of Missouricollege of agriculture, B. S. Attended Virginia Polytechnic Institute 6 years and Uni-	8
	Attended Virginia Polytechnic Institute 6 years and University of Missouri 1 year, receiving B. S. (C. E.) from the former and M. S. (Agr.) from the latter. Was student assistant in physics, Virginia Polytechnic Institute, 1 term. Engaged in general farming 1 term.	
A. R. Hecht, Lincoln, Nebr	term. Engaged in general farming 1 term.  Attended University of Nebraska 4 years. Was tester in	9
<del></del>	charge of cow-testing association 1 year; was also official cow tester for University of Nebraska dairy department. Engaged in general farming 1 summer.	
Ben F. Hensel, Lincoln, Nebr	Graduate Nebraska State Agricultural College, B. S. Worked on farm 6 years. Conducted a soil survey of	7
Arthur W. Tell, Lincoln, Nebr	Wayne and Phelps Counties, Nebr. Graduate University of Nebraska, B. S. in agriculture.	7
R. J. Bugbee, Woodsville, N. H	Taught school 2 years before entering college.  Graduate New Hampshire College. Market gardener and greenhouse manager 1 year. Engaged in emergency	. 9
	Graduate Hobart College, B. S.; also received M. S. degree from Cornell University college of agriculture. Employed by New York State Department of Agriculture	10
Robert V. Call, Cooperstown, N.Y.	6 years. Graduate Cornell University, B. S	6 9
	4 years. Prior to present appointment was engaged 6 months as assistant county agent and was engaged in emergency	11
Fred P. Foster, Canandaigua, N.Y.	food campaign. Graduate Cornell University, B. S. Managed and worked general farm. Was animal-husbandry specialist, Hol- stein-Friesian Register Co., Vermont, prior to present	3
J. L. Laycock, Rochester, N. Y	appointment.  Graduate New York State College of Agriculture, B. S.  Worked on farm during vacations. Operated 200-acre farm 3 years. For 4 months was manager of county	11

Name and home address.	Character of work. (See also general statement.)	Length of service.
		77 75
Fred D. Palmer, Lisle, N. Y	Graduate Cornell University, agricultural course. Worked	Yrs. Mos.
Fred R. Walkley, Auburn, N. Y	2 years on home farm and was manager of a farm 1 year. Graduate Cornell University, B. S. Taught agriculture	5
W. L. Kadderly, Corvallis, Oreg	1 year. Graduate Oregon Agricultural College, B. S. in agriculture. Engaged in farm-management demonstration work 4	1 7
George H. Baldwin, Kingston, R. I.	months prior to present appointment. Graduate Rhode Island State College, B. S., agricultural course. For 2 years prior to present appointment was assistant manager for Dexter Asylum Farm.	9
H. E. Bartram, Winooski, Vt	Graduate University of Vermont and State agricultural college, B. S. Taught agriculture in high school 2 years, and was assistant in plant pathology department, University of Vermont, and State agricultural college experiment station 4 years.	8.
Frank D. Jones, Burlington, Vt	Graduate University of Vermont and State agricultural college, B. S. Conducted home farm and was active in home community prior to present appointment.	8
C. S. Fletcher, Spokane, Wash	Graduate State College of Washington. Taught agriculture 4 years.	7
O. V. Patton, Pullman, Wash	Graduate State College of Washington, degree in horticulture. Taught in high school 1 semester. Was assistant fruit inspector for Walla Walla, Wash., approximately 2 years.	8

#### CLUB WORKERS.

The club workers are a part of the regular extension staff of the State college of agriculture and are employed cooperatively by the Department of Agriculture and

the State college of agriculture and the county farm bureau.

These club workers, through the farm bureau, meet with groups of boys and girls, These club workers, through the farm bureau, meet with groups of boys and girls, plan with them projects in food production and conservation and other practical work which the children carry on at their homes, organize them into clubs to receive practical instruction related to these projects, and secure an adult local leader to direct the work of the children. The workers organize corn clubs, potato clubs, garden clubs, garden and canning clubs, market-garden clubs, pig clubs, calf clubs, baby-beef clubs, sheep clubs, bread clubs, garment-making clubs, etc. The club worker assists these groups of boys and girls in keeping records of cost and production, in giving public demonstrations, in holding summer club festivals, in making exhibits of their products, and in holding at the close of the year an achievement day. The club worker travels about the county, meeting with the groups and leaders and giving expert advice, direction, and instruction on better methods in production and conservation. Deferred classification has been requested by the department and allowed by the draft boards in the following cases:

draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.
J. E. Carrigan, Burlington, Vt	Graduate University of Vermont and State agricultural college, B. S. Was employed as assistant in Vermont agricultural extension service. Served as county agent 2 years and later as assistant county agent leader before	Yrs. Mos.
R. N. Kebler, Marquette, Mich	entering upon present duties. Graduate Michigan Agricultural College, B. S. Was high- school teacher of agriculture. Prior to present appoint-	1 0
Walber B. Krueck, West Lafayette, Ind.	ment was county club leader 1 summer. Graduate University of Wisconsin college of agriculture. After graduation was instructor in animal husbandry; Purdue University school of agriculture 1 term; also	9
Harold G. Mattoon, Pittsfield, Mass.	engaged in live-stock work at Purdue University.  Graduate Massachusetts Agricultural College, B. S. Engaged 1 season in eradication of white-pine blister rust, and for short period as Massachusetts State nursery inspector, and as assistant county agent and assistant secretary for county farm bureau.	10
William P. Martin, Baton Rouge, La.	Graduate Mississippi Agricultural and Mechanical College, specializing in animal husbandry. Has had extensive	2 0
Edw. B. Oxley, Tucson, Ariz	practical farm experience. Graduate University of Arizona, B. S. Was assistant State club leader in Nevada prior to present appointment.	7

Name and home address.	Character of work. (See also general statement.)	Length of service.
Leland S. Parke, Tucson, Ariz  Charles E. Potter, Bozeman, Mont.	Graduate Iowa State College, B. S. A. Prior to present appointment was agricultural inspector of U. S. Reclamation Service in the Salt River Valley for 1½ years. Ranched in California and Arizona 1 year.  Attended Bethany College, West Virginia, 2 years; also senior in West Virginia College of Agriculture. Assistant in dairy department of latter institution. Was superintendent of county schools 2 years; also district superintendent and county club leader 1 year.	1 3
H. H. Williamson, College Station, Tex.	Graduate Texas Agricultural and Mechanical College, B. S. in agriculture. Also attended the advanced courses at the Iowa State Agricultural College.	6 3

#### FARM-MANAGEMENT DEMONSTRATORS.

Farm-management demonstrators are employed cooperatively by the State agricultural colleges and the United States Department of Agriculture. They deal with the business side of farming and aid farmers in improving the efficiency of their operations. By means of accurate comparisons of the business of individual farmers with that of their more efficient neighbors they are stimulated to greater food production per acre, per animal, and, what is more important, per man. The group method of demonstration has been so developed that in most cases farmers are able themselves to make these comparisons between their business and that of their neighbors.

In almost any community of the United States will be found a number of farmers who are doing from a third to a half more production work per man than are many of their neighbors. One way to deal with the labor problem is to transfer men from other communities. Another way is to teach farmers how to reorganize their farm rotations and live-stock production so as to use more efficient equipment and labor methods. The farm-management demonstrators are leaders in this class of work.

One of the principal purposes of the farm-management demonstration service is to assist farmers in adapting Federal and State programs to conditions existing in their communities.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name and home address.	Character of work. (See also general statement).	Length of service.
		Yrs. Mos.
William L. Cavert, St. Paul,	Graduate Cornell University, B. S. A. After graduating	3 10
Minn.	was engaged 2 years in farm-survey work.	11
Harold J. Evans, Georgetown Station, N. Y.	Graduate Cornell University, B. S. For 5 months was assistant county agent.	111
Charles H. Graves, East Lansing,	Graduate New York State College of Agriculture, Cornell	10
Mich.	University, B. S. Prior to present appointment was employed as agricultural engineer with Forestal (Ltd.),	
	Buenos Aires, Argentina.	
P. E. McNall, Manhattan, Kans.	Graduate Kansas State Agricultural College, B. S. in en-	3 10
	gineering, B. S. in agriculture, and M. S. in agriculture. Did practical electrical work in soils at the experiment	}
	station.	
Walter J. Tubbs, Burlington, Vt	Graduate Cornell University, B. S. Prior to present ap-	1 10
Pascal K. Whelpton, Washington,	pointment was assistant county agent. Graduate Cornell University agricultural college, B. S.	2 4
D. C.	Worked on a farm for 3 years; employed in farm-manage-	
	ment extension work in Connecticut 3 months; was instructor in agriculture in high school 4 months.	
	Structor in agriculture in high school 4 months.	

### SCIENTIFIC EMPLOYEES OF INSULAR EXPERIMENT STATIONS.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name and home address.	Character of work.	Length of service.
Clarence W. Carpenter, Honolulu, Hawaii.	Employed as pathologist at the Hawaii Experiment Station, where he organized the plant-disease work. Has made a survey of some of the more important diseases of economic crops, and during the present crisis has conducted a campaign for the control of plant diseases of bananas which threaten that important food crop, and is engaged in a study of their causes and means of control. A familiarity with tropical conditions, such as he has gained through the 2 years he has been in Hawaii, is very necessary in carrying on the work with plant diseases. Graduate University of Vermont, B. S. and M.S., having specialized in bacteriology and chemistry. Had practical experience while a student as assistant in the laboratory of hygiene of the Vermont State Board of Health	Yrs. Mos. 5
Mazewell O. Johnson, Honolulu, Hawaii.	and in the bacteriological-pathological laboratories of the Vermont Experiment Station. Prior to present appointment was assistant in plant pathology in the Bureau of Plant Industry, working on cotton and truck-crop diseases. Specialized on potato and other diseases and published a number of papers on his investigations.  Has charge of the chemical work of the Hawaii Agricultural Experiment Station. Mr. Johnson has made special studies of some of the peculiar soil problems met with in Hawaii. As a result of his discoveries, several thousand acres of land which were formerly unproductive have been added to the area devoted to food crops. He has been very active in emergency work relating to drying of food products, in working out fertilizer formulas for food crops, and in preparing publications. His 3 years' experience in the islands has given him an excellent grasp of the soil, fertilizer, and other problems and of the special conditions met with.  Graduate Purdue University, B. S. in chemical engineering; also received M. S. degree from George Washington University. Prior to present appointment was assistant chemist in the meat-inspection division of the Bureau of	4 4
Wilton T. White, Fairbanks, Alaska.	Animal Industry, and for short periods was employed in a technical capacity by commercial concerns.  Has charge of the station at Fairbanks, in the interior of Alaska, where experimental work with farm crops, and especially with cereals, is conducted on a scale comparable to commercial farming. Unusual difficulty has been experienced in securing suitable men for the Alaska stations, which require not only adequate training but practical experience and resourcefulness in meeting contingencies due to the remote location.  Graduate Kansas State Agricultural College, B. S. Taught agriculture 1 year before graduation. Had charge of a 640-acre farm in Kansas devoted to grain and stock farming 3 years prior to entering department service.	
	BUREAU OF SOILS.	
Name and home address.	Character of work.	Length of service.
J. N. Carothers, Washington, D. C.	As electrochemist in the Bureau of Soils has developed and perfected a process for smelting phosphate rock in an electric furnace and collecting phosphoric acid so produced in an electric precipitator. Installed and operated such an installation on a commercial scale at Hoboken, N. J., demonstrating the commercial feasibility of the process for users of pure acid. Has recently completed a piece of work in connection with the War Industries Board involving the design of an electric furnace suitable for the production of phosphorus direct from phosphate rock. At present is installing apparatus for an investigation of the possibility of fixing atmospheric nitrogen by means of the electric arc, using a current of very high tension and frequency. This work has a direct bearing on the problem of munitions as well as on that of fertilizer supplies.	Yrs. Mos. 2 11

Name and home address.	Character of work.	Length of service.
		Yrs. Mos
J. N. Carothers, Washington, D. C.	Graduate Clemson College, B. S. in agriculture and chemistry. Missey in the control of the contr	
	istry; Missouri University, graduate courses in chemistry and engineering. Prior to present appointment em-	
	and engineering. Prior to present appointment employed as chemist, assistant superintendent, and director	
	of plant workmen, Southern Electro-Chemical Co., Nitrole, S. C.; later with the Southern Electrical Chem-	
	ical Co. and Interstate Chemical Corporation, developing	
AND MINE TO A	a process for smelting phosphate rock in electric furnace.	
Albert R. Merz, Washington, D. C.	In charge of the project of surveying the blast-furnace industry to determine present operating conditions. This	6
	involves the analysis of samples of the materials charged	
	into the furnaces and of the slag drawn off. Such sam-	
	ples have been secured from practically all the blast fur-	
	naces of importance in the country, and the work of ex- amination is proceeding actively. It is already evident that the amount of potash potentially available from this	
	that the amount of potash potentially available from this	
	American source is very large, probably at least equaling	
	the total amount ever imported from Germany prior to the war.	
	Graduate University of Virginia, B. S. and M. S. Prior to	
	present appointment was chemist, Raymond Mining Co.,	
i.	Stuarts Draft, Va., dealing with manganese and iron ores; assistant chemist, Pennsylvania State Agricultural Ex-	
	periment Station, fertilizer control, butters, milks, mis-	
	cellaneous work; assistant chemist, Southern Cotton Oil	
	Co., Savannah, Ga., cottonseed meal, hulls, glycerin, pancolene, B fat, soap stock, coal; assistant chemist,	
	E. I. du Pont de Nemours & Co., dynamite, fulminate	
	of mercury, nitroglycerine, miscellaneous work; chemist,	
	Railroad Valley Co., Tonopah, Nev., brines, salts, waters, muds, and rocks, with especial reference to potash; and	
	conducted nitrate investigations on desert basin deposits.	
	Since entering the Bureau of Soils has been engaged in	
	the analyses of salines of the United States, investiga- tions on kelps, analyses of phosphatic materials, prep-	
	aration of concentrated fertilizers, and investigation on	
William H. For Washington D. C.	nitrates of the Great Basin.	6
William H. Fry, Washington, D. C.	Engaged in the identification, by means of the petrographic microscope, of minerals in soils, fertilizers, fertilizer ma-	6
	terials, or samples of unknown composition. By means	
	of the petrographic microscope it is possible for one skilled	
	in its use to quickly and surely determine the presence or absence of any ordinary minerals without a tedious	
	chemical examination, and, in the case of soils, to deter-	
	mine the form in which the elements are present, which	
	can not be determined by any other means. The work is essential to the soil investigations being carried on for	
	this reason. There are very few petrographers in the	
	United States (not more than 10), and it would not be	
	possible to replace Mr. Fry except by obtaining a petro- grapher from some other department of the Government	
	or other institution doing equally important work.	
	Graduate University of North Carolina, A. B., major in	
	mineralogy and petrography; graduate student, Univer-	
	sity of North Carolina, 1 year. Prior to present appointment was assistant in geology, University of North Caro-	
	lina, 2 years, and instructor in geology 1 year; also min-	
	eralogist, North Carolina geological and economic survey, 1 year.	
	1 your.	

#### SCIENTISTS IN SOIL SURVEY.

Each of these employees is in charge of a soil-survey field party employed in mapping the soils of certain selected agricultural areas throughout the United States. This requires ability to identify and technically classify soils, to locate them topographically, and to indicate their relative agricultural value and adaptation. It involves a technical knowledge of geology, of soils, and of plane-table traverse work, requiring quite a comprehensive knowledge of agricultural conditions and mothtds, together with the ability to analyze conditions and express them accurately in report form for publication.

This work has a direct bearing on the existing situation by reason of the fact that the results constitute an exceedingly important factor in crop production. The individual States recognize this and are cooperating extensively with the Department of Agriculture in the work, furnishing funds and men to the equivalent of that supplied by the department, and are using the data secured in their efforts looking toward intelligent activity and increased production of necessary food crops. This

fundamental work is also valuable to the extension service in these States in their regular as well as their emergency work. The results are in constant use by the Army in the location of camp sites, in sanitation, in military maneuvers, and plans for the national defense. The Bureau of Soils is actively cooperating with the War Department and securing military information in addition to the regular soil-survey data, furnished directly to the War Department, relating to roads, bridges, houses, topographic features, character of soils, and drainage conditions.

The number of men trained in this line is limited and the field for them is confined

to the demands of the department and States cooperating in this work. The service has always been able to absorb all the trained men available. The department's force has been built up gradually and systematically and is the cumulative result of years of selection and training. Twenty-one men were lost during the past year from this force, which is 40 per cent of the normal field force. In spite of the most strenuous efforts, it has been possible to fill only 10 of these vacancies.

Deferred classification has been requested and allowed by draft boards in the cases

of the following scientists in soil survey:

[Washington, D. C., is the official headquarters of all the scientists in soil survey herein listed, but practi-

cany their entire time is spent in the neid.		
Name and home address.	Character of work. (See also general statement.)	Length of service.
John H. Agee, Washington, D. C	Graduate University of Tennessee, B. S. in mining engineering. Prior to present appointment 2 seasons of field work in investigations of phosphate deposits with Tennessee geological survey and I year in cooperative soil-	Yrs. Mos. 6 5
A.C. Anderson, Washington, D.C.	agriculture. Prior to present appointment classified land for Northern Pacific Ry. and engaged 5 years in co-	2 10
M.W. Beck, Washington, D.C	operative soil-survey work for State of North Dakota. Graduate Pennsylvania State College, B. S. in agronomy. Prior to present appointment 2 seasons as laboratory assistant soil research laboratory, Pennsylvania State College.	5 9
E. W. Deeter, Washington, D. C	Graduate Pennsylvania State College, B. S. Prior to present appointment 2 years of soil mapping in field for State of Pennsylvania; assistant instructor in soils.	5 0
C. E. Deardorff, Washington, D. C.	University of Missouri, B. S. in agritulture; post-graduate work. Prior to present appointment 3 years cooperative	2 1
J. E. Dunn, Washington, D. C	soil survey for Missouri. Graduate Columbia Normal Academy, Missouri. Graduate University of Missouri, B. S. in civil engineering. Prior to present appointment taught school 2 years; 2 years' experience State soil-survey work; 1 year Reclaments Service, resided on form	5 10
F. A. Hayes, Washington, D. C	mation Service; raised on farm. Graduate University of Nebraska, M. A.; 2 years post- graduate work in geography and conservation. Prior to present appointment was employed 4 seasons in Forest Service, 1 season in cooperative soil-survey work for	1 6
F. Z. Hutton, Washington, D. C	Nebraska. Graduate Pennsylvania State College, B. S. in agronomy,	3 10
R. C. Jurney, Washington, D. C	specializing in soils and farm management.  Graduate University of North Carolina, B. A. Prior to present appointment spent 2 years in cooperative soil-	3 4
N. M. Kirk, Washington, D. C	survey work for North Carolina. Graduate Pennsylvania State College, B. S., specializing in horticulture and animal husbandry; vacations in practical farm work.	5 10
E. T. Maxon, Washington, D. C	Took 1 year's advanced work in New York State Normal School; graduate college of agriculture, Cornell Univer- sity, B. S.; 1 year assistant department of soil technology. Prior to present appointment was for 2 years assistant in State soil survey.	5 8
A. H. Meyer, Washington, D. C	Graduate University of Wisconsin, B. S. in agriculture; post-graduate work in soils, meteorology, and climatology. Prior to present appointment engaged 2 seasons in Wisconsin soil survey.	7 1
A. L. Patrick, Washington, D. C	Graduate State normal school, Stroudsburg, Pa.; graduate Pennsylvania State College, B. S. in agriculture; assistant instructor in soil and physical laboratory. Prior to present appointment had field experience in State soil-survey work.	5 0
Lee Roy Schoenmann, Washing-	Graduate University of Wisconson, B.S. Prior to present	6 8
ton, D. C. E. H. Smies, Washington, D. C	appointment had 3 years in State soil-survey work. Graduate Kansas State College, B. S. in agronomy; stu-	5 0
W. I. Watkins, Washington, D. C.	dent assistant in soils, laboratory, and field. Graduate University of Missouri, B. S. Prior to present appointment worked in soils and fertilizer in laboratory and field; assisted in State soil-survey work.	3 10

Name and home address.	Character of work. (See also general statement.)	Length of service.
E. S. Vanatta, Washington, D. C.	Graduate University of Missouri, B. S. in agriculture, specializing in agronomy and animal husbandry. Prior to present appointment engaged 3 years in cooperative soil-survey work for Missouri.	Yrs. Mos. 7 0
L. V. Davis, Washington, D. C	Graduate University of Missouri, B. S.: post-graduate work in soil investigations. Prior to present appointment was	4 5
H. W. Hawker, Washington, D. C.	assistant in State cooperative soil-survey work. Received high-school and business education	6 11

### OFFICE OF THE SECRETARY.

Name and home address.	Character of work. (See also general statement.)	Length	
Floyd R. Harrison, Washington, D. C.	As assistant to the Secretary, Mr. Harrison is the principal executive officer in the immediate office of the Secretary of Agriculture.	Yrs. A	 fos. 9
	Educated in public schools of Petersburg, Va., and later took courses at the Emerson Institute, the Drillery Shorthand School, and Strayer's Business College, Washington, D. C.; then completed 3-year law course at Georgetown University and was graduated with the		
	degree of LL. B. Was appointed in the Department of Agriculture Sept. 1, 1906, and has served as secretary to the solicitor, chief clerk of the Bureau of Chemistry, executive clerk to the Assistant Secretary, private secretary to the Assistant Secretary of Agriculture,		
,	confidential clerk to the Secretary of Agriculture, private secretary to the Secretary of Agriculture, and assistant to the Secretary.		
Arthur H. Fast, Washington, D. C.	As assistant to the solicitor of the department, is engaged upon legal work incident to the administration of the United States warehouse act. He has been engaged for	2	4
	several months in preparing regulations for cotton warehouses, which work required considerable personal investigation of methods of storing and handling cotton so as to enable him efficiently to perform his duties and		
	dispose of legal questions arising under the statute. He has acquired much information along the lines of his official duties which is of very great value to the depart-		
	ment. For one to take his place would mean that he would have to spend a long time in studying and acquainting himself with the work before he could perform the duties with efficiency. At the present time the office of the solicitor is undermanned. Difficulty in find-		
	ing lawyers suitably qualified who are willing to accept appointments is constantly increasing. College graduate, with degrees of A. B. and LL. B.; took		
	special course in public speaking. Prior to entering the department was for 2 years teacher in public high school and for 2 years engaged in private law practice.		
Harlan D. Smith, Washington, D. C.	Has charge of the Office of Information, in which capacity he supervises the preparation of all press material, the department's Weekly News Letter, and many circulars;	3	0
	and assists in the preparation and distribution of posters and other material. Is a trained newspaper man and is particularly skilled in the popular treatment of scientific subjects. The Office of Information is the principal		
	source of material for newspaper and periodical publi- cation concerning the activities of the department. Besides supplying daily and weekly newspapers, gen- eral periodicals, and class publications, it is of special		
	service to the agricultural press in digesting, condensing, and reviewing important bulletins. He is the only man now available for conducting this important function of the department.		

## OFFICE OF FARM MANAGEMENT.

Name and home address.	Character of work.	Length of service.
E. H. Thomson, Takoma Park, D. C.	As assistant chief of the Office of Farm Management, assists the chief of the office in supervising the investigational activities and acts for the chief in his absence on all questions dealing with the work of the office. In addition to these duties he has direct supervision of the section of farm organization which includes the farm-survey work, investigations of farm machinery and equipment, cooperative farm-management investigations, and various special farm-organization problems.  Graduate Cornell University College of Agriculture, B. S. in agriculture; did graduate work last half of session year and 2 years following, receiving degree of M. S. in agriculture; took full course in agriculture with special approaches on deliving or form management. Prior terms	Yrs. Mos. 8 9
R. G. Hainesworth, Washington, D. C.	emphasis on dairying and farm management. Prior to entering departmental service lived on a farm.  As head draftsman, is engaged on highly technical work in the preparation of maps, charts, and other material having to do with the publication of the Atlas of American Agriculture and the publication of the Atlas of the World Agriculture. Has been connected with this project for a number of years and is in charge of the compilation and preparation of a very large amount of material entering into this work. This material has been used very extensively in the war emergency, not only by the Department of Agriculture but by other branches of the Government, particularly the Shipping Board. The termination of this employee's appointment would be a very material loss, necessitating considerable delay	5 4
R obert W. Meyers, Philadelphia, Pa.	in furnishing information required by the various executive departments.  As farm-help specialist for the State of Pennsylvania, Mr. Meyers assists farmers in securing an adequate supply of farm labor for their operations. In this work he cooperates actively with the county agents and with the representatives of the Department of Labor.	7

# DIVISION OF ACCOUNTS AND DISBURSEMENTS.

Name and home address.	Character of work.	Length of service.
John M. Kemper, jr., Washington, D. C.	Aside from occupying the bonded statutory position of deputy disbursing clerk, the responsibilities of which require a person in whom the disbursing clerk reposes the utmost confidence, this employee assists the Chief of the Division of Accounts and Disbursements in compiling and preparing the various financial reports required of the Secretary of Agriculture from time to time by Congress, and in the preparation of the annual estimates of appropriations. This work requires an intimate knowledge of the appropriations of the Department of Agriculture and the financial transactions of the Treasury Department, which information can be gained only through years of experience such as this employee has had. He also keeps the record of allotments to the various bureaus of the department made in conformity with law by the Secretary from the regular appropriations and the war emergency appropriation provided by Congress for stimulating agriculture and facilitating the distribution of products. Mr. Kemper has been trained under the personal supervision of the Chief of the Division of Accounts and Disbursements in this work of the Department of Agriculture for years.	Yrs, Mo:

### FEDERAL HORTICULTURAL BOARD.

ERADICATION OF COTTON BOLLWORM.

Plant quarantine inspectors (field clean-up work).—The pink bollworm of cotton, undoubtedly the worst known insect pest of cotton, has obtained a limited foothold at a number of points in the State of Texas. This department, under an emergency appropriation, is making a vigorous attempt to exterminate the insect at these restricted points and has accumulated, with great difficulty under existing conditions, a number of technically trained men to direct such field work of inspection and extermination. This work is of the utmost importance to the future of the cotton crop of the United States, and it would be extremely difficult, if not impossible, to replace the men engaged in this work should they be lost to the department. These men have all gained experience and developed capacity in this work, which involves technical knowledge of the pink bollworm and ability to recognize evidences of infestation by it in the field, in addition to the practical supervision of large numbers of laborers in the physical work of destroying cotton and other field clean-up and disinfection operations. Although a nonassembled continuing civil-service examination for plant quarantine inspector was announced November 14, 1917, the list of eligibles resulting from this examination has not yet been sufficient to meet the needs. Even if it were possible to obtain a sufficient number of qualified persons, they could not, for a considerable length of time, take the places of the men now engaged in this work without substantial material loss and detriment to the adequate and effective operation of the service.

Deferred classification has been requested by the department and allowed by

draft boards in the following cases:

Name and home address.	Character of work. (See also general statement.)	Length of service.
Herald M. Brundrett, Houston,	Graduate Texas Agricultural and Mechanical College, B. S. in Agriculture, specializing in entomology and horticulture. During 1 year was employed as instructor in	Yrs. Mos. 1 0
Clifton C. Halbedl, Houston, Tex Wrathall K. Hanson, Houston, Tex.	entomology in the college. Graduate Texas Agricultural and Mechanical College, B. S. Graduate Texas Agricultural and Mechanical College, B. S. in agriculture. Prior to entering department service was employed for a short period by the American Re-	$\begin{array}{ccc} 1 & 1 \\ & 7\frac{1}{2} \end{array}$
Lowell F. Locke, Houston, Tex	frigerator Transit Co. as fruit inspector. Graduate New Mexico Agricultural College, B. S. in agriculture, course including entomology. Prior to present appointment worked at a dry-land experiment station at Tucumcari, N. Mex., for about 10 months, keeping	$6\frac{1}{2}$
Walter Ohlendorf, Houston, Tex	soil, moisture, crop, weather, and other records. Graduate Texas Agricultural and Mechanical College, B. S.; took a post-graduate course at Cornell University, qualifying for M. S. degree. Prior to present appoint- ment was employed 1½ years by the Texas department of agriculture, being engaged in demonstration work in insect control, investigational work on insects, agri- cultural exhibit work, nursery inspection, and other work of a similar nature.	6½
Karl H. Townsend, Houston, Tex.	Received high-school education and studied Spanish 1 year; also studied chemistry and trigonometry at the George Washington University 3 years. Prior to present appointment was employed by the Bureau of Plant Industry for 11 years. During the last 7 years of his service in the latter bureau was employed for a considerable portion of time in work which gave him a good deal of training in the making of field observations along scientific lines. Has been engaged upon his present duties 8 months.	11 8

Plant quarantine inspectors (inspectors at ports of entry).—The quarantine service of this department in relation to the pink boll worm at the ports of entry on the Mexican border controls the entry of all cars, freight, and personal baggage from Mexico into the United States and supervises the disinfection of such cars, freight, and baggage. This work requires a special technical training in entomology and also in the methods and practices of fumigation and general disinfection. This quarantine service, to be efficient, must be continuous and under the direction of experienced men, and its interruption or the breaking in of new men involves a risk of the entry of the pest

being guarded against and a nullifying of all previous work. The men now engaged in this work have shown peculiar aptness therefor and are men of energy, ability, and tact. The prevention of the entry of the pink boll worm through the agency of such traffic may mean the prevention of enormous future losses to the cotton crop of such traine may mean the prevention of enormous future losses to the cotton crop of America, a crop, furthermore, of very vital war interest. A nonassembled continuing civil-service examination for plant quarantine inspector was announced November 14, 1917, but the list of eligibles resulting from this examination has not yet been sufficient to meet the needs. Even if it were possible to obtain a sufficient number of qualified persons, they could not, for a considerable length of time, take the place of the men now engaged in this work without substantial material loss and detriment to the adequate and effective operation of the service.

Deferred classification has been requested by the department and allowed by draft

boards in the following cases:

Name and home address.	Character of work.	Length of service.
Edgar S. Jewell, Laredo, Tex	Prior to his present appointment was employed by the Federal Horticultural Board in connection with the Maine potato quarantine; also did some work for the Bureau of Plant Industry in connection with potato-	Yrs. Mos.
Ulphian C. Loftin, Lerdo, Durango, Mexico.	disease experiments in Maine. Entomological assistant in charge of the station established in the Laguna district of Mexico for a study of the pink boll worm of cotton. These studies are to be the basis of control operations and are of the greatest importance in relation to the future handling of the very serious pink boll worm problem. His loss at this time would interrupt this very valuable piece of work, and in view of the conditions of isolation under which he lives it would be most difficult to find any one to take his place.  Graduate North Carolina Agricultural and Mechanical College, B. S.; post graduate work at the University of Florida, consisting of courses in soil, physics, embryology, and entomology leading to degree of M. S.; served as a laboratory assistant to the entomologist of the Florida Experiment station in connection with a number of citrus investigations, velvet-bean spraying, and other insect investigations. During 5 summer vacations was employed by the North Carolina Agricultural and Mechanical College Experiment Station in the dairy, bacteriological, and veterinary departments. Prior to present appointment was engaged as entomological assistant in the Bureau of Entomology in the investigation of rougar-cane insects. For several months was stationed in Cuba searching for parasites of sugar-cane insects for importation into the United States. This work was of a novel nature, and methods had to be	5 0
Kenneth B. McKinney, Lerdo, Durango, Mexico.	devised as it proceeded, requiring special study and special ability.  Is detailed to the station established in the Laguna district in Mexico for a study of the pink boll worm of cotton. These studies are to be the basis of control operations and are of the greatest importance in relation to the future handling of the very serious pink-boll worm problem. His loss at this time would interrupt this very valuable piece of work, and in view of the isolation under which he lives it would be most difficult to find any one to take his place.  Graduate University of Tennessee, giving special attention to entomology. Prior to present appointment was engaged on tobacco insect work for the Bureau of Entomology under temporary appointments averaging about 6 months each for a period of over 4 years.	3 0

# INSECTICIDE AND FUNGICIDE BOARD.

Name and home address.	Character of work,	Length of service.
J. Louis Monarch, Washington, D. C.	Performs the duties of an executive assistant. Has charge of many details involved in the development of cases under the insecticide act, and in the absence of the executive officer performs the administrative work of the insecticide and fungicide board, including the direction of inspectors and sample collectors. The most important feature of his work is to review the scientific data presented by the several branches of the board in connection with alleged violations of the insecticide act and to cooperate with them in the preparation of charges. Has been employed by the board for 7 years, and it would be extremely difficult, if not impossible, to secure a man of similar training and experience.  Graduate of Georgetown Law School, and admitted to the bar of the District of Columbia. Prior to entering the service of the board was employed in the office of the solicitor of this department.	Yrs. Mos. 9 0

